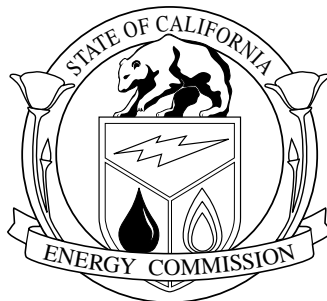


Report on Generator & Consumer Data Reporting Requirements



DECEMBER 1999

CALIFORNIA
ENERGY
COMMISSION

Gray Davis, *Governor*

P300-99-007

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Generator & Consumer Data
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EXECUTIVE SUMMARY

INTRODUCTION

In this report, the California Energy Commission (Energy Commission) presents its approach for collecting essential generator and consumer data. The Energy Commission will use these data in carrying out its mandated functions of trends assessment, policy development and market monitoring.

This report provides the foundation for revisions to the existing Energy Commission data collection regulations. These regulations include the Quarterly Fuels and Energy Report, Common Forecasting Methodology, and Utility Data Plans. The proposed revisions are necessary to reflect fundamental changes in the electricity industry.

The Executive Summary provides an overview that addresses the following questions:

- Why Is The Energy Commission Changing Its Data Collection Regulations?
- What Is The Impact Of Restructuring On Data Collection?
- What Are Parties' Concerns About Data Collection?
- How Did The Commission Arrive At Its Final Proposals?
- What Are The Energy Commission's Goals And Principles In Changing Its Data Collection Regulations?
- What Are The Energy Commission's Needs For And Uses Of Data Under Restructuring?
- What Alternatives To Direct Collection Are Available For Acquiring Data?
- What Are The Primary Features Of The Commission's Proposal?
- What Are The Remaining Data Collection Issues?

The report contains two Sections, Section I —Generator Data Reporting Requirements, and Section II —Consumer Data Reporting Requirements. In these Sections, the Energy Commission addresses in greater detail the issues surrounding data collection,

responses to parties comments regarding the data collection proposals, and the elements of the data reporting requirements that the Energy Commission will include in revisions to data collection regulations.

In some instances, portions of this report are repeated because the Energy Commission anticipates that not everyone will read the entire report. Therefore, it is the Commission's goal that Sections I and II can stand alone. It is also important to note that the data collection and information policies established in this report will be the basis for the revisions to the Energy Commission's regulations. These revisions will be made in a formal rulemaking that will commence at the beginning of the new year.

Finally, it is the Commission's opinion that this report substantially address SB 110's requirements regarding consolidating and clarifying the Energy Commission's reporting requirements and reviewing its data collection authorities. This report can serve as the foundation for the March 31, 2000 report to the Governor and the Legislature mandated by SB 110.

WHY IS THE ENERGY COMMISSION CHANGING ITS DATA COLLECTION REGULATIONS?

The Energy Commission's existing data collection practices were developed when the electric industry was a regulated monopoly. Under this framework, investor-owned and municipal utilities were the primary agents generating and delivering electricity to end-use customers. These utilities were the principal sources for data and information on the electricity industry.

Restructuring of the electricity industry, through AB 1890, has resulted in a number of changes that called for the Energy Commission to re-examine and revise its existing data collection regulations. The Energy Commission initiated a proceeding, headed by the Ad Hoc Information Committee (Committee), to examine the needs for data issues and data collection in a restructured industry. The purpose of this proceeding was to bring the Energy Commission's data collection practices in line with the realities of the restructured market.

WHAT IS THE IMPACT OF RESTRUCTURING ON DATA COLLECTION?

The restructuring of the electricity market has led to increasing reliance on competitive forces in the electricity industry. The generation of electricity is no longer a monopoly and has been opened to competition. However, the distribution and transmission of electricity have remained regulated monopolies under restructuring. These changes significantly affect the role of market participants and consequently the Energy Commission's sources for data.

New market participants and institutions have emerged who affect the supply and demand for electricity. New market participants include energy service providers, aggregators, scheduling coordinators and independent energy producers. Two such institutions —the Independent System Operator and the California Power Exchange — were created and changed the relationships of the various market participants to each other. These institutions provide the mechanisms for implementing the competitive provisions of AB 1890. Finally, new electricity products and services have been brought forward to meet the changing needs and desires of electricity consumers.

Electricity Supply

Before restructuring, the generation of electricity was conducted primarily by utilities. Utilities were required to build or acquire sufficient generating resources to meet the needs of their customers. In return, utilities were allowed a reasonable profit for investment in and operation of those generators. Beginning in the 1980 s, independent power producers emerged as generators of electricity, but the electricity was still sold under contract to utilities.

Because utilities controlled the majority of the generating capacity in the State, the Energy Commission s data regulations relied on these utilities as the primary sources for data on electricity generation.

Restructuring has created new classes and types of independent generators who now sell directly into the electricity market. In addition, investor-owned utilities have sold off the majority of their generating facilities to private companies. Finally, new power plants proposed for construction in the State are also owned and financed by private companies. These changes mean that investor-owned utilities are no longer the primary sources for data on generation facilities in the State.

Electricity Demand

On the demand or consumer side, utilities were once the sole providers of retail customer sales of electricity. Utilities were granted a monopoly to serve a specific service territory, or geographic area, and in return assumed an obligation to serve all customers in that service area. With this obligation came the primary responsibility for forecasting and planning for the needs of all service-area customers.

As a result, utilities were also the primary sources for electricity consumption data in the State under the Energy Commission s data regulations.

With restructuring, retail electricity customers can now choose from competing electricity suppliers. New energy service providers have emerged to serve the needs of an increasing number of electricity consumers throughout the State. These energy service providers have become an increasingly important source for data on the retail sales of electricity.

The former investor-owned utilities, now utility distribution companies, no longer have an exclusive right to sell electricity to end-use customers. Instead, they have become the default provider for retail electricity supplies. This change means a customer has to choose a different supplier or the utility distribution company automatically serves them.

These utility distribution companies have retained an obligation to distribute electricity services, which remain a regulated monopoly under restructuring. This changing role, however, has reduced their primary responsibility for forecasting and planning for the needs of all customers in their service territories.

These changes mean that utilities are no longer the primary sources for data on energy consumption or retail electricity sales in the State. However, they are a primary source for data related to the distribution of electricity. For electricity consumption, all retailers should provide information on their end-use sales.

Natural Gas Market

Over the last twenty years the natural gas market has moved from full regulation to partial regulation. The Federal Government continues to regulate wellhead gas prices. However, the interstate transportation market, while still largely regulated, allows for market-based bidding of surplus pipeline capacity.

In California, since 1986, local distribution companies have provided transportation services to customers. This allows larger customers —referred to as non-core customers—to purchase their own supplies of natural gas from gas marketers rather than having to rely on the local gas utility. In 1991, residential and small commercial customers were allowed to purchase their own supply from aggregators under the California Public Utility Commission's core-aggregation program.

As with the electricity market, new retailers have emerged to sell gas directly to customers. The natural gas utilities function as the default providers of retail services. However, an important distinction is that the natural gas utility retains an obligation to serve core customers.

WHAT ARE PARTIES' CONCERNS ABOUT DATA COLLECTION?

Over the course of the Energy Market Information Proceeding, parties have raised concerns about the following:

- Energy Commission's need for and uses of data,
- The costs and burdens of data collection,
- The confidentiality of commercially-sensitive data, and
- The possibility of using alternative sources of data instead of directly collecting it.

Need for and Uses of Data

Early in the proceeding, one of the principal challenges the Energy Commission faced was in addressing parties' concerns about its need for and uses of data under restructuring. Some parties asserted that restructuring had altogether eliminated any role for the Energy Commission with respect to the electricity market.

Others argued for a continuing, but narrower role for the Energy Commission than its previous role in the regulated monopoly environment. Some parties asserted that essential public interests meant a continuing, robust role for the Energy Commission under restructuring.

Depending on how the parties defined the Energy Commission's role they recommended different levels of data for the Energy Commission—from no data at all to more than current regulations provided. Parties called for a re-examination of the Energy Commission's roles and responsibilities in light of restructuring.

The Energy Commission also re-examined the need for and uses of data before developing specific data-collection proposals. This examination allowed the Energy Commission to identify those data that are essential to adequately understanding the restructured market. In this process, the Energy Commission was also able to identify and eliminate those data collected in the monopoly market that are no longer necessary.

The Costs and Burdens of Data Collection

Parties throughout the proceeding called for the Energy Commission to ensure that its new data collection regulations do not impose costly and burdensome requirements on market participants. Some parties believe that imposing any data collection requirements on new market participants would place them at a competitive disadvantage. They asserted that the costs of collecting data could negatively affect the competitive market by imposing unnecessary costs on consumers or further reducing the already slim profit margins of new market participants.

The Confidentiality of Commercially-Sensitive Data

Several parties raised concerns about the collection of commercially-sensitive or proprietary data. Some argued that the Energy Commission could not adequately protect against release of commercially-sensitive data. Others argued for changes in the Energy Commission's current confidentiality regulations and additional protections to safeguard against the release of sensitive data.

Several parties asserted that release of such data would harm competition. Competitors believed they could use sensitive information to gain a market advantage or misinterpreted in regulatory proceedings to effect unfair changes in market rules.

Alternative Sources and Methods for Collecting Data

A few parties suggested that the Energy Commission could purchase data from private firms instead of collecting it from market participants, but they did not identify specific, private sources of data.

Other parties suggested the Energy Commission should continue to rely on utilities as the primary sources of data on generators and consumers. In response, utilities argued that their filing of data on behalf of other market participants was inconsistent with the principles underlying restructuring and new market structures.

Some parties used their concerns about confidentiality to argue that the Energy Commission should not collect any commercially-sensitive information. These parties argued that the Energy Commission should rely on publicly-available data from other sources, such as the Federal Government and estimates or proxies for all data needs. In addition, parties suggested statistical sampling and survey techniques as a source of data.

HOW DID THE ENERGY COMMISSION REACH ITS DECISION?

The Energy Commission was faced with the task of balancing the competing, and sometimes conflicting, concerns raised in the proceeding. In this proceeding, the Energy Commission benefited greatly from the input and participation of the various interests and market participants.

The Committee released reports and solicited formal comments on the following:

- The Energy Commission's roles, responsibilities and jurisdiction;
- The scope of issues the Energy Commission would address in the rulemaking; and
- The draft proposals for both the generator- and consumer data requirements.

The Committee held over nine workshops and hearings and provided numerous opportunities for parties to participate. Over the last two years, the Energy Commission and parties have worked hard to reach a shared understanding of the issues involved in data collection and arrive at data collection proposals that result in fairness and streamlining.

Examination of Roles, Responsibilities and Jurisdiction

As noted above, The Energy Commission's first step was to re-examine its roles and responsibilities with respect to data collection. During the early part of the Energy Market Information Proceeding, the Energy Commission examined the effect of restructuring on its responsibilities, jurisdiction, and authority for data collection and information-related functions. As a result of this examination, the Energy Commission

adopted findings of fact, conclusions of law and policy conclusions to guide the remainder of the proceeding ¹

However, the Energy Commission found that the restructured nature of the industry has changed to increase reliance on market forces and competition. The Energy Commission concluded that its responsibilities for assessing and monitoring energy market trends and developing energy policy continue to be justified.

The Energy Commission also concluded that, in and of itself, restructuring has not eliminated the need for its electricity assessment and policy development functions. The Energy Commission further concluded that restructuring has not changed its authority to collect data needed to carry out these functions.

Scope of the Rulemaking

To begin the next phase of the proceeding, the Committee released a report on the scope of the rulemaking and asked for parties' input.² This scoping report laid out the following issues to be addressed in the remainder of the proceeding:

- The exact needs for and uses of data under restructuring,
- The alternative methods and sources to acquire data needed by the Energy Commission.

The Committee then released a *Draft Proposal For Generator Data Reporting Requirements On April 28, 1999*, and after input from parties released *Its Final Proposal On August 17, 1999*. Following that, the Committee released a *Draft Proposal On Consumer Data Reporting Requirements on September 17, 1999*, and asked for final comments by October 19, 1999.

Parties filed comments on specific elements of the Committee's proposed data collection approaches (see Sections 1 and 2 for details). The Committee weighed the comments of parties carefully and responded directly to those comments, either with changes to accommodate concerns or with explanations of the reasons for not including certain measures proposed in comments. The Committee used the suggestions of parties, wherever possible, to minimize the overall burdens of data collection proposals.

At its November 17, 1999 Business Meeting, the Energy Commission voted unanimously to adopt the Committee's recommendation. The Energy Commission understands it made decisions that do not have agreements from all parties. However, the Energy Commission (a public-interest, decision-making body) believes its approach for generator and consumer data will provide them with sufficient data to carry out its mandated responsibilities.

At the same time, the Energy Commission is convinced that its data collection proposals result in major streamlining of data collection over past data collection practices and shift significant amounts of data collection from industry to the

Commission staff. Finally, the Energy Commission considers its approach fairly distributes the reporting requirements among the different market participants.

WHAT ARE THE ENERGY COMMISSION S GOALS AND PRINCIPLES IN CHANGING ITS DATA COLLECTION REGULATIONS?

The Energy Commission endorsed several policy goals, or principles, for the development of data collection regulations. These goals include:

- Establishing data collection obligations consistent with the principle that entities performing equivalent functions or delivering equivalent services should have equivalent data-submission responsibilities.
- Streamlining data-collection practices where possible and developing the most efficient, equitable and cost-effective methods for acquiring necessary data.
- Relying on one form or set of forms for all entities that perform the same function in the market, where possible.
- On the supply side, acquiring sufficient data to allow the Energy Commission to characterize power plants and the electricity system in conducting electricity system analysis.
- On the demand side, acquiring sufficient data to allow the Energy Commission to accurately forecast the demand for electricity and assess consumer-choice opportunities and consumer behavior.

The Energy Commission s approach represents its best effort to balance opposing interests and approaches raised by the various parties. The Energy Commission s first priority is to gather the necessary data to enable it to carry out its responsibilities. The next priority was to maintain, to the extent possible, a level playing field for market participants in filing the needed data. These principles guided the Energy Commission in arriving at a set of data collection requirements that are streamlined, fair and cost effective for all concerned.

WHAT ARE THE ENERGY COMMISSION S NEEDS FOR AND USES OF DATA UNDER RESTRUCTURING?

The Energy Commission has a number of responsibilities that require it to collect generator and consumer data.³ These responsibilities include: evaluating the trends in energy supply and demand (or consumption) in California; assessing trends in statewide demographics and economic factors that would affect the demand and supply of energy; and evaluating the implications of these trends on society, the economy, the environment, and the public health and safety.

As a result, the Energy Commission has very broad analysis and data collection authority. This authority allows it to monitor energy industries and assess energy trends so that it can develop and implement prudent energy policy for the State. A critical input to the Energy Commission analytical capabilities are essential data and accurate information on electricity supply and demand.

The primary purpose of the Energy Commission's mandated functions is to inform the Governor, the Legislature and the public about the mid- and long-term outlook for electricity supply and demand. It also includes developing robust strategies under a range of possible future scenarios.

The Energy Commission's analytic activities serve as an early warning system to identify emerging problems or opportunities in energy markets. The Energy Commission examines the uncertainties and market barriers that could negatively affect the supply of, prices of, and demand for electricity. It also helps to identify opportunities to improve efficiency, lower prices, minimize environmental impacts and conserve natural resources.

On the supply, or generator, side of the electricity market, the Energy Commission uses data on electricity generation (or output) and power plant characteristics as essential inputs in conducting electricity-system analysis. These data enable the Energy Commission to perform a number of important analytical activities including:

- Assessing the future supply adequacy of the electricity system,
- Investigating future trends in market-clearing prices and investment opportunities,
- Assessing the California market supply and demand relationships with neighboring regions in the Interconnected Western Grid,
- Evaluating environmental attributes and benefits of renewable and alternative technologies, and
- Investigating land-use compatibility and system impacts of supply additions.

On the demand or consumer side, the Energy Commission uses data on electricity and natural gas consumption, consumer characteristics and load research. These data are inputs to the following analytical activities:

- Assessing future trends in energy consumption (such as how much electricity will be consumed where, when and by whom).
- Forecasting energy demand for use in electricity system analysis; building and appliance efficiency standards; energy efficiency program targeting, measurement and evaluation; and electricity and natural gas price projections.
- Evaluating the impact of market performance on energy consumption and patterns of energy use.

- Assessing demand responsiveness in the restructured market (such as demand bidding strategies, rate design, providing price signals through meters, and load shedding measures).
- Implementing public purpose programs including energy efficiency, RD&D, and renewables programs.

WHAT ALTERNATIVES TO DIRECT COLLECTION ARE AVAILABLE FOR ACQUIRING DATA?

As staff and parties suggested, the Energy Commission examined a number of alternatives to direct data collection. These alternatives included:

- Using of publicly available data from other sources including government agencies,
- Using of estimation techniques to develop proxies for actual data and
- Performing statistical sampling as a substitute for direct data collection.

Numerous areas were identified where parties file data submitted to other government agencies—including the Federal Energy Information Agency and Federal Energy Regulatory Commission. These data could be submitted to the Energy Commission as a compliance option for meeting proposed data requirements for generator and consumer data. These included generators' output and load shapes.

In addition, the Energy Commission identified several areas where estimation would be used for a number of data elements including power plant characteristics, fuel prices and revenue data.

The Energy Commission also examined using statistical sampling as a means of acquiring data on energy consumption, power plant characteristics and consumer characteristics. For generator output and energy consumption data, the Energy Commission discovered the costs of sampling to get an accurate picture of total generation and consumption in the State was likely to be several times more expensive than direct data collection from the different generators and retailers.

The Energy Commission found that many power plant characteristics would lend themselves to sampling along with the development of other estimation methods. The staff will be developing these estimation methods for a number of variables as a result of the Energy Commission's approach. This approach results in a significant shift in responsibilities for data collection to the Energy Commission and away from market participants. The approach also relies on statistical sampling and other research to collect a number of consumer characteristics and load data.

Some parties suggested that these alternative methods should be used in lieu of any direct data collection of generator or consumer data. While this approach would completely eliminate any costs or burdens on market participants for data collection, it would result in much higher costs for the Energy Commission and the public for data collection.

In addition, the Energy Commission discovered that not all of the data could be acquired through these alternative methods without unreasonably compromising accuracy and quality. The Energy Commission believes that direct data collection is, in limited cases, the most efficient and equitable method to collect some data elements.

As a result, the Energy Commission's examination of its approach contains a combination of methods that are designed to acquire specific data needed by the Energy Commission in the most efficient and cost effective way possible to meet its responsibilities.

WHAT ARE THE PRIMARY FEATURES OF THE ENERGY COMMISSION'S APPROACH?

The following is a summary of the primary features of the proposal developed to collect generator and consumer data.

Generator Data

Power Plant Characteristics

The Energy Commission will develop one integrated database for power plant characteristics and require generators to update that database. This approach will be used in lieu of direct reporting of power plant characteristics every two years under existing regulations.

The majority of data on power plant characteristics will be estimated by staff. Smaller facilities will be required to file less data than larger facilities. The majority of data and forecasts previously required under the Common Forecasting Methodology would be eliminated as part of the proposal. The staff will take on necessary forecasting activities previously done by utilities, such as the demand forecast.

This approach significantly reduces burdens of existing regulations on Utility Distribution Companies but places limited new data collection responsibilities on new market participants such as independent power producers. Under this approach all owners of generation facilities will have equivalent reporting requirements.

Generator Output and Fuel Use

Generators will be required to provide monthly generator output, fuel-use and fuel-cost data on a quarterly basis for their power plants. This approach will eliminate and

consolidate a number of *Quarterly Fuels & Energy Report* forms, significantly reducing the number of forms and data to be collected.

Compliance options will include submitting Federal Energy Regulatory Commission and Energy Information Administration's forms in lieu of filing Energy Commission forms. This approach will help reduce duplicative filings of data by market participants.

In order to address concerns about the highly sensitive nature of fuel-cost data and to further protect confidentiality, a three-month or one-quarter delay on the filing of fuel-cost data will be instituted.

Consumer Data

Consumption Data

Retailers of electricity and natural gas will be required to file monthly consumption data and number of accounts, filed on a quarterly basis by 4-digit Standard Industrial Classification code (SIC) and county. Retailers may use accounting system extracts to file aggregated data with the Energy Commission.

Utility distribution companies will supply SIC coding for all customers, including direct-access customers served by private retailers. The Energy Commission believes this is a distribution-related function; utility distribution companies have the resources and expertise to perform this activity in the most cost-effective way with appropriate compensation for costs.

Consumer Characteristics Data

Medium and large utilities would have fixed-survey requirements to provide consumer characteristics data. As a compliance option to meeting the fixed requirements, the Energy Commission will allow parties to participate in a collaborative effort to supply these.

A funding source for these requirements may be provided in a recent proposal under the California Measurement and Advisory Council. The Energy Commission believes that this framework provides the most efficient method to leverage the collective efforts of parties in conducting consumer characteristics research and surveys.

This framework is awaiting approval by the California Public Utilities Commission. The Energy Commission will actively pursue this approval. This framework is a key element of the Energy Commission's consumer-data collection proposal. Without it, less efficient methods of data collection would be the only available option.

Estimation techniques will be used as a substitute for accounting-based revenue data previously relied on in Energy Commission data regulations. Retailers will be asked to submit an estimate of average commodity prices by sector.

Load Research Data

Medium and large utilities will continue to be required to file system and sector load shapes related to their distribution function. The staff will assume the primary responsibility for conducting research or surveys on end-use load shapes, formerly filed by utilities. The Energy Commission would also accept load-shape filings with Federal Energy Regulatory Commission as a compliance option.

Confidentiality and Disclosure

As already discussed, many parties raised concerns about confidentiality and possible disclosure of commercially-sensitive data. After carefully reviewing the record and the Commission's confidentiality provisions, the Energy Commission has concluded that in some limited cases proprietary information is necessary for the Energy Commission to carry out its mandated functions.

The fact that data is competitively sensitive does not relieve market participants from the obligation to provide these data to government agencies. In fact, the Legislature adopted a statutory scheme in the Public Records Act that allows State agencies to collect proprietary data to conduct their business while protecting the data from disclosure.

These mechanisms have been effective in enabling State agencies to use confidential data and protect confidentiality. The Energy Commission has a long history of collecting confidential data without releasing these data (*Petroleum Industry Information Reporting Act and Quarterly Fuels and Energy Report*).

In the approach for generator and consumer data, the Energy Commission has already minimized the amount of confidential information it proposes to collect which is absolutely necessary to do its job. The Energy Commission will explore additional efforts to ensure that confidential data will not be released.

Parties also raised concerns about the Energy Commission's confidentiality regulations and provisions for disclosure. Utility distribution companies are particularly concerned about protecting customer privacy. They have suggested that the current disclosure provisions—referred to as the 3/60 rule—does not adequately protect against inadvertent disclosure.

As a result, the Energy Commission will initiate a parallel process to revise confidentiality regulations while the data collection regulations are being developed. The Energy Commission will vigorously pursue protecting the confidentiality of the data it collects.

WHAT ARE THE REMAINING DATA COLLECTION ISSUES?

The Energy Commission has identified two important issues that require resolution. These issues are critical to successfully implementing its new data collection approach.

First, the approach shifts a number of responsibilities and activities for data collection from utilities to the Energy Commission staff. The Energy Commission will need additional staff resources to receive, process and enforce data requirements from the increased number of affected parties. Additional Energy Commission budget resources, or redirection within existing budgeted resources, are necessary to carry out these new responsibilities. Parties who benefit from this shift in responsibilities should support Energy Commission efforts to assure adequate funding.

Second, the State must develop a permanent, long-term funding source for the collaborative efforts on consumer characteristics surveys and research and the reimbursement of certain data collection activities. Using Public Goods Charge funds under the California Measurement and Advisory Council framework, in the current proposal, is only an interim solution to funding. In addition, use of these funds may not be appropriate for all categories of data. Parties interested in a long-term funding solution must work cooperatively with the Legislature, the Davis Administration, the Energy Commission, and the California Public Utilities Commission to seek a permanent solution.

END NOTES

¹ June 12, 1998 *Report on Energy Market Information Proceedings*, Ad Hoc Information Committee. On June 24, 1998 the full Commission adopted by resolution the findings and conclusions of this report.

² July 28, 1999, *Ad Hoc Information Committee Scoping Report*, Describing Resumption of the Rulemaking.

³ Public Resources Code Section 25216.5.

SECTION 1: GENERATOR DATA REPORTING REQUIREMENTS

INTRODUCTION

In this report, the California Energy Commission (Energy Commission) lays out its new approach for collecting essential data from generators on power plant characteristics, generator output and fuel use of their generation facilities. The data the Energy Commission will collect will be used to carry out its mandated functions of market monitoring, trends assessment, and policy development. This report outlines a new approach for acquiring necessary data that streamlines and reduces overall reporting burdens for the industry from those practices currently in place. The Energy Commission believes this approach will meet its goal of having a sound information base on which to develop and implement prudent energy policy for the State. The Energy Commission also believes this new approach is more appropriate for the restructured electricity market than past practices.

LEGAL MANDATES

The Warren-Alquist Act mandates the Energy Commission to evaluate the trends in energy supply and demand, statewide demographics and economic factors that would effect the demand and supply of energy; and the social, economic and environmental implications of these trends¹. As such, the Energy Commission has very broad analysis and data collection authority under the Act to allow it to monitor energy industries and assess long-term trends in order to develop and implement energy policy for the State. The Act requires the Energy Commission to analyze supply and demand for all energy markets and energy products and services including electricity, natural gas, petroleum and petroleum products, transportation and alternative fuels, energy efficiency, and renewables.

In its June 12, 1998 *Report on the Energy Market Information Proceedings*, the Ad Hoc Information Committee (Committee) developed findings of fact and conclusions of law with respect to its jurisdiction and authority for its information-related functions. This report was developed largely to respond to parties' questions and concerns regarding the Energy Commission's authority and jurisdiction in the restructured electricity market. At its June 24, 1998 Business Meeting, the full Energy Commission adopted the Committee's findings and conclusions dealing with the

Energy Commission's jurisdiction and authority, as well as its roles and functions in the restructured electricity market.

The Energy Commission concluded that its responsibilities for assessing and monitoring energy market trends and developing energy policies continue to be justified and may become more important as the competitive electricity market emerges. The fundamental public interest rationale for continued assessment and monitoring of the electricity industry are the statewide electric-system impacts and environmental impacts associated with electric facilities. The addition of new power plants and transmission lines directly impacts the operation of other power plants and transmission lines in the interconnected electricity grid. These additions also involve environmental and other impacts that extend beyond the local area where facilities are sited. As such, an understanding of these impacts is essential to developing informed State energy policies.

The Energy Commission found that while the nature of the electricity industry has changed to rely on market forces and competition, restructuring, in and of itself, does not eliminate the need for its electricity monitoring and policy development functions. It is important to note that other energy markets have become increasingly competitive over the last 20 years, in particular oil and petroleum products markets. The Energy Commission has continued to monitor trends and assess these competitive markets, identified major emerging problems and helped to avoid some projected future problems altogether. These activities were supported by ongoing data collection on oil and petroleum markets that provided the information base for analytical studies.

The Energy Commission went on to endorse certain activities, including data collection, that support these core functions and concluded these activities remain important to State decision-makers, consumers and market participants. The Energy Commission concluded that electricity industry restructuring does not change the Energy Commission's authority to collect data necessary to carry out its mandated functions. The Energy Commission also concluded that it has ample authority under existing mandates to collect data to support its core functions from new market participants, where appropriate.

PAST DATA COLLECTION PRACTICES

The Energy Commission has collected two types of data with respect to electric generation in the State:

- Generator output, or production, and fuel use for various facilities; and
- Power plant, or generator, characteristics including engineering characteristics of various facilities.

Historically, data on generator output and fuel use was collected primarily through the Quarterly Fuel and Energy Reporting (QFER) process. Utility Monthly Fuel and Operations Report (UMFOR) and Federal Energy Regulatory Commission (FERC)

forms supplemented these data. QFER included different reporting requirements for generation facilities depending on their ownership by utilities, private entities selling power, private entities producing power for their own use onsite, and facility capacity. QFER consists of approximately 10 different forms requesting data on electricity generation output and fuel use (See **Appendix A** for listing of relevant forms).

Data on power plant characteristics was historically collected through the Common Forecasting Methodology (CFM) process under the Biennial Forecast and Assessment of Loads and Resources Regulations. A great deal of specific information was reported by utilities through CFM. Unlike the QFER data forms that were adopted once and remained static, CFM was explicitly revised and adjusted as the first step of each *Electricity Report (ER)* cycle. The concept was to adjust the specific filing requirements to satisfy the specific information needs of the likely issues to be addressed in the Electricity Report. CFM regulations formed the framework for utility filings of demand forecasts and resource plans that were then turned into specific filing requirements. Electricity Report 96 involved approximately 20 individual forms for non-regulated utilities and approximately 35 forms for utilities. (See **Appendix A** for list of relevant forms.)

One of the primary uses for the above data prior to restructuring was for the Energy Commission to carry out its forecasting and assessment function to develop State energy policy through an open process of determining trends, developing projections, and assessing options for meeting anticipated demand growth. The resulting Electricity Report, mandated by the Warren-Alquist Act, guided government determinations of how much electricity was needed and explored alternatives to constructing new generation facilities. It also served as a central basis for the Energy Commission's power plant siting process. In addition, data was used to support other analytical studies on issues including electric system reliability, air impacts, the role of municipal utilities, deregulation issues and other emerging issues.

RESTRUCTURED ENVIRONMENT

Restructuring of the electricity market has led to increased reliance on competition and introduced new market participants, market institutions, and products and services. Prior to restructuring, investor-owned and municipal utilities were the primary agents generating and delivering electricity to end-use customers. These utilities were the principal sources for data and information on the electricity industry. The Energy Commission routinely collected data from electric utilities to carry out its historic, mandated responsibilities in assessing trends, resource planning and power plant siting. Beginning in the 1980s, independent power producers became an additional source of data on their electricity production that was sold to utilities.

Electricity industry restructuring allowed for the creation of new market participants including energy service providers, scheduling coordinators, aggregators, and non-utility generators. New market institutions, including the Independent System Operator (ISO) and California Power Exchange (PX), were also created which changed how the

various market participants related to each other. In addition, with the divestiture of investor owned utility (IOU) generation, IOUs no longer control the majority of generation in the State. Municipal utilities continue to generate and serve the needs of their customers, some participating in the ISO and PX while others are not. The designers of restructuring anticipated the emergence of new types and classes of independent generators who would sell directly to the market, not through contracts with utilities, as had been the case in the past. Consequently, continued reliance on utilities for data regarding all of the generation in the State is no longer appropriate.

At the same time, the competitive nature of the restructured market means that data reporting burdens must be carefully weighed against the need for the data. Many new entities in the market are small generators with limited staff and resources. In addition, the changing role of IOUs means that much of the historic planning-type activities, once conducted by these utilities and which formed the basis for much of the data submitted to the Energy Commission, are no longer being undertaken in the restructured market.

The role of government in the restructured environment is also being re-examined. The supply and resource planning activities traditionally carried out under the Electricity Report are being re-evaluated. In crafting these portions of the Warren-Alquist Act, the Legislature could not have foreseen the introduction of competition and restructuring of the electricity market that would occur over the twenty years since its passage. As a result, the regulatory and data collection requirements of the Electricity Report and CFM may no longer be in step with the restructured environment. The Energy Commission is considering this issue, along with other issues regarding our functions in the restructured market, in other public processes.

These factors have led the Energy Commission to examine its need for data, the type of data to be collected, and the most appropriate sources for collecting necessary data. For the purposes of this proceeding, the Energy Commission addressed data needs for the Energy Commission to carry out its mandated functions of market monitoring, trend assessment and policy development.

Under the monopoly structure, the Energy Commission assessed statewide and service area supply and demand issues. Since monopoly providers had a geographic franchise service territory and an obligation to serve, the service area approach to analyze regional issues and impacts made sense. The Energy Commission forecasted demand and assessed supply trends, including power plant operating characteristics such as reserve margins, other components of supply, and demand side strategies for each major service area.

Under restructuring, statewide assessment remains an important duty of the Energy Commission. However, service territories no longer adequately define the regional aspects of the electricity system. In the restructured environment, the structure of the ISO and PX is based on zones (established based on transmission capabilities) within the State. Generators bid their generation into the PX on the basis of zones. The ISO

operates the system to provide transmission services, congestion mitigation and ancillary and other essential network services, also on a zonal basis. In accordance with this shift in the structure of the market, the Energy Commission may choose to analyze regional electricity system issues and impacts to correspond to these zones.

ENERGY MARKET INFORMATION PROCEEDING

In order to bring its data collection and information-related functions and responsibilities more in line with this restructured industry, the Energy Commission established the Ad Hoc Information Committee (Committee) and delegated to it three principal tasks:

- Initiate a rulemaking to amend and delete existing regulations and adopt new regulations relating to disclosure of Energy Commission records (confidentiality regulations);
- Convene a proceeding to serve as a central forum for the discussion of issues associated with the Energy Commission's data-related responsibilities that may be broader than regulation changes;
- Initiate a rulemaking to revise the Energy Commission's data collection regulations.

PRINCIPLES

The Energy Commission endorsed the Committee's policy goals for the rulemaking proceeding on data collection at the same time it adopted findings and conclusions on jurisdictional issues in June 1998. The Energy Commission affirmed the Committee's goal of streamlining its data-collection activities, where possible, and developing the most efficient, equitable and cost-effective method for acquiring necessary data. The Energy Commission determined that the function a market participant performs, regardless of ownership or monopoly status, should define what data it supplies. This was based on the policy principle that entities performing equivalent functions or delivering equivalent services, should have equivalent data submission responsibilities.

The Energy Commission confirmed that the Committee's policy should be to pursue data necessary to allow the Energy Commission to accurately project loads and adequately model the electricity system as part of its electricity monitoring, trends assessment and policy-development functions. The Energy Commission endorsed the Committee's examination of new methods to obtain these data in the rulemaking.

On the supply side, the Energy Commission endorsed the principle that it needs sufficient or appropriate data to allow it to characterize power plants and the electricity system including fuel use, heat rates and other characteristics to allow system modeling. The Energy Commission supported the need for system and generation data including ISO/PX prices and quantities to support analytical reports. As part of its

streamlining efforts, the Energy Commission endorsed the principle that it should rely on one form or set of forms for all entities who perform the same function in the market.

ASSESSMENT ACTIVITIES AND USES FOR DATA UNDER RESTRUCTURING

As part of its broad assessment authority under the Warren-Alquist Act, the Energy Commission conducts analytical activities to support three primary functions relevant to this proceeding: electricity monitoring, trend assessment and policy development. The primary purpose of these activities is to inform the Governor, the Legislature and the public about the mid- and long-term outlooks for the electricity industry and to develop robust strategies under a range of possible future scenarios. The Energy Commission can also examine the impacts of future demand and supply trends on the economy, the environment, and the public health and safety to guide policy makers in addressing important energy issues and developing sound energy policy.

One of the primary objectives of the Energy Commission, in assessing the electricity market, is to inform the Legislature and Governor about whether the competitive generation market and its structures are meeting the goals and assumptions contained in AB 1890.² In moving from a regulated generation market to a competitive one the Legislature intended:

- That the State's citizens and businesses achieve the economic benefits of restructuring;
- That new market structures provided competitive, low-cost and reliable electric service;
- That customers in the new market have sufficient information and protections; and
- That California's commitment to developing diverse, environmentally sensitive electricity resources is preserved.

The Energy Commission intends to use its analytical capabilities to address these objectives and issues and provide essential information about how the market is performing and the extent to which the public policy goals in AB 1890 are being met. This information will be important as the market continues to evolve and we move through the transition period to a more fully competitive market. The Energy Commission will need some fundamental data on generator output and fuel use, as well as power plant characteristics, to adequately assess the market and the interconnected electricity system under restructuring.

The Energy Commission serves as an early warning system for identifying emerging problems and opportunities. We examine uncertainties, market barriers, and diseconomies for the energy industry and help to identify opportunities to improve efficiency, lower prices, minimize environmental impacts and conserve natural resources. The Energy Commission can also play an important role in identifying trade-offs between investments in generation, transmission and load-reducing strategies. As the restructured market develops, the Energy Commission can provide information and assess ways to increase the competitiveness of electricity components, such as ancillary services, that are still being provided through a mix of cost-based and market-based mechanisms.

To support these analytical activities, the Energy Commission collects data and develops accurate information on current and historic electricity production, resource mix and fuel consumption. This involves assessment of the California market and its supply and demand relationships with adjacent regions in the interconnected Western Grid. The Energy Commission examines supply-side performance, identifying trends in system performance, and potential concerns and opportunities should these trends continue. In this capacity, the Energy Commission also develops the *Net System Power Report* required by SB 1305.

As part of our analyses, the Energy Commission evaluates prospective demand-growth and supply changes and assesses whether reliability goals are likely to be met in the intermediate- and long-term time periods.³ The Energy Commission develops and publishes future trend assessments of retail-electricity prices and major-component services. The Energy Commission also forecasts market-clearing prices and assesses whether market-clearing prices appear to be sufficient to support additional generation construction. In addition, the Energy Commission proposes to assess the value of demand-side bidding into the PX and the ISO, as an element of future reliability standards, and examine whether the costs of metering and price signaling justify their benefits. The Energy Commission can also assess the environmental benefits of renewables and alternative technologies given technological performance, regional environmental-licensing requirements, land-use compatibility and the system impacts of hypothetical increments of supply-resource additions.

A NEW CONCEPT FOR ACQUIRING DATA

The Energy Commission is proposing major streamlining of data collection to accommodate the objective of reducing burdens on market participants in the restructured electricity market. The Energy Commission struggled with issues of equity in deciding what to require of both the new participants, including ESPs and generators, and the remaining entities of monopoly IOU providers, primarily the UDCs in the restructured market.

The Energy Commission attempted to strike a balance between competing interests in the proceeding by not placing undue burdens on new market participants, recognizing that some of the new participants are small companies with limited resources functioning in a market with slim margins. At the same time, the Energy Commission resisted the temptation to rely on existing monopoly entities for data that may no longer be appropriate for them to file on the behalf of others. The Energy Commission also recognizes that many of the past resource planning activities, which were the source of much of the data filed by UDCs in the past, have been unilaterally reduced by the UDCs.

In order to address the varied and competing concerns of entities who participated in the proceeding, the Energy Commission developed a new concept for acquiring data. The Energy Commission assessed and balanced the actual burden of providing data against the need and uses for that data. The Energy Commission is convinced, based on its understanding of the costs associated with the reduced burden represented by this approach, that the public benefits justify the reporting requirements.

The Energy Commission developed an approach that includes a graduated set of requirements based on the size of power plants, reflecting their importance to the Energy Commission's understanding of the electricity system and the potential impacts of various changes to that system. The Energy Commission is proposing to require a limited set of plant-specific data on power plant characteristics only for those power plants 50 MW or larger.

The Energy Commission will undertake the development of one database for power plant characteristics data. Rather than having parties file all their data, as required in the past, the Energy Commission staff will periodically (every two years) send the relevant portions of this database to individual generators for them to update. This approach significantly reduces burdens on UDCs, while at the same time placing only minor data collection responsibilities on new market participants such as independent generators.

To minimize the need for additional staff resources, the Energy Commission recommends that the update process be on-going and routinized, rather than a single event undertaken every other year. For example, a portion of the database could be updated each quarter, resulting in a complete update over the course of the two-year cycle. In addition, the Energy Commission recommends the staff make every effort to integrate its various databases for the purposes of reducing duplication and improving data sharing between its many analytical programs.

In addition to the development of a database, the Energy Commission staff will take on responsibilities for the forecasting and estimation of a number of variables regarding generation that were previously conducted by utilities. These new activities for staff will have associated resource implications for the Energy Commission that will need to be addressed. In addition, staff and industry must cooperatively develop estimation and/or forecasting methods because high-quality data is essential to the success of this

effort. The Energy Commission believes this approach is likely to be adequate for our data needs, but reserves the flexibility for the Energy Commission to revise the approach should it prove to be unsatisfactory.

The Energy Commission is also proposing the use of data filed with other government agencies, in particular the Federal EIA to the maximum extent feasible, as a compliance option for generators. This option will help reduce duplicative and redundant filing of data by market participants. In general, when the reporting requirements of another entity correspond to the Energy Commission's for one or more variables, a generator may report information using that entity's forms. Staff will review EIA, FERC, ISO, State Board of Equalization and any other available public agency forms and develop a technical reference report that will identify additional acceptable compliance options for use in drafting data-collection regulations. Staff will periodically prepare a report to identify revisions to the forms used by other agencies and identify additional compliance options, if they become available.

Finally, the Energy Commission is eliminating the vast majority of the data and projections filed by utilities under CFM. Upon adoption of regulations implementing this proposal, staff will take on responsibility for the forecasting activities, previously undertaken by regulated utilities, that are necessary for the Energy Commission to meet its assessment and policy-development obligations.

As required under past data collection practices, entities submitting data under this approach would be required to attest to its accuracy and validity. This new approach imposes an obligation for parties to provide data of the specific type requested, of the best quality available and according to schedule. In addition, Energy Commission staff, as with other data collected, will conduct the necessary reviews of data submissions to ensure the compliance and accuracy of data filings.

POWER PLANT CHARACTERISTICS

The Energy Commission has developed a new approach to the data-collection methods currently used for power plant characteristics. As noted above, this approach relies on the Energy Commission providing one database on power plant characteristics with biennial updating by market participants. This involves a major shift in responsibility for maintaining data to the Energy Commission. Generators would only be obligated to provide biennial updates.

In the past, the database for generator characteristics was supplied by utilities and updated filings were required under Energy Commission regulations. Under the Committee's new approach, the Energy Commission staff would take on the burden of building a database on generator characteristics and would require only a biennial updating by generators. The Energy Commission staff would send the relevant portions of the database to generators every two years and ask that they simply review the data and note any changes in power plant characteristics. This represents a major

streamlining of data collection from market participants and substantial shift of burdens to the Energy Commission.

Implementing the Principles

The Energy Commission's decisions are guided by the principles of pursuing data-collection methods that are not overly burdensome for any single entity and that balance reporting burdens with public benefits.

The Energy Commission identified opportunities for staff to facilitate the reporting process. Additionally, the principle that equivalent function defines data collection formed the basis of our power plant characteristics data-collection recommendations. As a result, utility and non-utility generators are treated the same where they perform the same functions. A distinction is drawn in regards to the size, or capacity group, of the generator.

CFM Reporting is Suspended

Consistent with suspension of CFM, historic CFM requirements, such as long-term projections will be replaced with a small subset of historic data on power plant characteristics. This results in the elimination of over 50 forms previously required under CFM as shown in **Appendix A**. Now, only one form on generator or power plant characteristics will be required of generators.

The Energy Commission acknowledges that creating a power plant characteristics reporting requirement increases the number of entities reporting these data to the Energy Commission, as compared to the old CFM process. This is, however, an inevitable consequence of industry restructuring in California. That process effectively eliminates the utility as an intermediary, and it is the Energy Commission's opinion that utility-based reporting requirements should be reduced substantially. One benefit of this change is that California's reporting requirements will be more consistent with EIA reporting requirements. The EIA has always required individual facilities to submit reports to them.

GENERATOR OUTPUT AND FUEL USE DATA

The Energy Commission will collect generator output, fuel use and historic fuel prices. Generators will report monthly data on a quarterly basis. This approach includes a compliance option, however, that will significantly reduce the burden on the entity reporting. For historic fuel price data, the generators be allowed a three-month or one-quarter delay in filing of this data.

This approach calls for an increase in the number of entities reporting to the Energy Commission and a decrease in the level of effort for reporting entities over past data collection practices. Also, this approach eliminates and consolidates a number of forms for the data collection, historically done under QFER, significantly reducing the number of QFER forms the Energy Commission will collect in the future as shown in

Appendix A. The large effort currently required of utilities to provide aggregated purchases from many generators, both their own and those they have contracts with, can be eliminated. A reduced set of forms applicable to all generators, filed by the generator, will suffice under the Energy Commission's new approach. Furthermore, this submission can, in most cases, be a photocopy of forms that must already be filed with EIA. Thus the effort required of generators for new direct-reporting requirements to the Energy Commission is negligible.

The EIA is a significant source for much of the data needed on generator output and fuel use. For more than 90 percent of this data the Energy Commission needs, EIA forms will be considered acceptable compliance options in many specific instances, further reducing burdens on market participants. EIA data will be sufficient for generators below 50 MW. For generators above 50 MW, EIA data will also be sufficient with the exception of one variable; information on fuel prices.

The Energy Commission believes these substantial changes represent a new way of doing business that is more in line with a competitive market than our past methods of data collection.

Implementing the Principles

Consistent with the recommendations regarding power plant characteristics, this approach is guided by the principle of pursuing data collection methods that are not overly burdensome and embody a least-cost approach. Additionally, the principle that equivalent function defines data collection formed the basis of the generation and fuel-use recommendation.

Generator Output and Fuel Use Reporting Requirements

All generators, whether owned by a regulated utility or a private entity, are treated the same where they perform the same functions. The effect of this is that regulated utilities will report the detailed output data for their own facilities, but will no longer be required to report the output of generators with which they have purchase agreements. All privately-owned generators would report directly to the Energy Commission. This change results in a reduction in utility reporting requirements, but an increase in non-utility reporting requirements. However, reporting requirements for the industry as a whole are greatly reduced from previous practices. An important feature of this approach is segmented, or graduated, reporting requirements based on the size of the facility. The smallest facilities (below 10 MW) would file nothing at all, while the larger facilities (10 MW or larger in size) would file monthly information on a quarterly basis.

CONFIDENTIALITY

Some of the variables the Energy Commission will collect may be sensitive business information, while other variables are not. Specifically, those data that parties expressed concerns about are heat rates, forced outage rates, ramp rates, maintenance

outage schedule, operation and maintenance (O&M) costs, and fuel price. The Energy Commission will use estimation techniques for heat rates, O&M costs and emission rates, so confidentiality may be less of a concern. However, the Energy Commission agrees that the data elements listed above meet the definition of trade secret and should be fully protected from release.

As discussed in the response to parties' comments section of this report, the Energy Commission will initiate a process to revisit its confidentiality regulations. This process will be conducted in parallel with the development of data-collection regulations. During the rulemaking, the Energy Commission will determine the exact data elements that meet the definition of trade secrets and provide for blanket confidentiality designation of appropriate categories of data. This will obviate the need for parties to request confidentiality on a case-by-case basis for data submissions. The Energy Commission will also review its internal procedures for handling confidential information, to safeguard against any inadvertent disclosure of confidential data.

In light of the Energy Commission's intent to further revise confidentiality regulations to meet industry concerns, and the recent actions of EIA to revise its confidentiality provisions for various types of power plant-specific data, generators should have increasing confidence that once data is designated confidential it will remain so.

The remainder of this section addresses differences in the treatment of confidential data between the Energy Commission and EIA that will need to be addressed when the confidentiality regulations are revised.

Table 1
California Energy Commission Procedures
For Designating Information Confidential

	Generator Output	Fuel Use	Fuel Cost/Price
Before 8/3/98	By Request	By Request	By Request
After 8/3/98	Automatic Protection	Automatic Protection	Automatic Protection

Table 1 shows that requests for confidential protection of data were handled on a case-by-case basis prior to August 3, 1998. An individual submitter had to make a request for confidentiality.

Although the decision to disclose such data was influenced by the submitter's request, disclosure was governed by a balancing of public benefit against private harm. After that date, the Energy Commission regulations provided automatic confidentiality protection for generator output and fuel use data. In providing for disclosure of aggregated data, the Energy Commission may require consultation with the submitter to identify suitable aggregation methods.

However, changes to procedures at the Federal Government level, that were made subsequent to Energy Commission decisions, greatly affected what can be considered confidential. These changes are shown in **Table 2**.

Table 2
Federal Energy Information Agency Procedures
For Designating and Disclosing Confidential Information

	Generator Output	Fuel Use	Fuel Cost/Price
Before 1/1/99	Automatic Protection	Automatic Protection	Not Collected
After 1/1/99	Disclosable	Disclosable	Not Collected

Table 2 shows, as a result of changes at the EIA on January 1, 1999, production and fuel-use data is disclosable and cannot be held confidential. Public access to data on generator output and fuel use collected by EIA eliminates the Energy Commission's ability to designate such data confidential.

However, information on fuel cost and price are unaffected by the changes at the Federal level and current Energy Commission confidentiality regulations suggest non utility data submissions will receive automatic confidential designation, as shown in **Table 3**. Energy Commission confidentiality regulations do not explicitly refer to fuel-price, or cost data, since they are not part of the existing QFER reporting requirements. The Energy Commission's intent is to provide protections for cost/price data and will work to that end. Disclosure of fuel cost/price data may occur in aggregated form. This may require consultation with the submitter to identify suitable aggregation methods.

Table 3
Results of Combined Agency Procedures

For Designating and Disclosing Information	Generator Output	Fuel Use	Fuel Cost/Price
After 1/1/99	Disclosable	Disclosable	Automatic protection for non-utility facility data. Aggregated disclosure to ensure confidentiality of individual facility data.

Power Plant Characteristics Recommendations

The Energy Commission will continue to collect basic data on the power plant characteristics for generators that are located in California. However, to reduce reporting burdens on market participants, the Energy Commission will have staff develop a database on power-plant characteristics that would be updated by power plant owners every two years. The proposed data are shown in **Table 4** and are organized into five general categories, by size. The variables are plant identifiers, operating data, operation and maintenance costs, fuel price, and emission factors. In this section, the specific data requirements for each capacity group are described, including who must report, and compliance options to facilitate reporting.

Most of these data are reported to the EIA, the PX and/or the ISO and are readily available to the generators and UDCs who would be required to report to the Energy

Commission. In many cases, however, data are reported under confidentiality agreements. These data will be given confidential protection at the Energy Commission as well, which may require revisions to confidentiality regulations or other measures. The confidential nature of certain data is a major concern of many parties to this proceeding.

In particular, parties expressed concerns about facility-specific operating, operation and maintenance cost, and fuel price data. These concerns prompted the Energy Commission to develop generic estimates for many of the data. For smaller power plants (those from 1-10 MW and 10-50 MW), the Energy Commission believes that staff and industry can develop suitable estimates for various, specific power-generation technologies. For the smallest two categories of power plants, staff can identify suitable generic assumptions based on manufacturer data and relieve any burdens on the owners of such facilities to report most engineering and cost variables. For power plants greater than 50MW in size, the Energy Commission will use staff-developed estimates for O&M costs and emission factors. The Energy Commission will rely on a full-rated-capacity heat rate as currently filed with EIA. Staff will be responsible for estimating heat rate curves needed for system modeling. The Energy Commission will collect plant-specific characteristics for power plants 50 MW or greater in size, as outlined below.

This graduated set of reporting requirements balances the incremental benefits to the Energy Commission of having sufficiently precise data to enable us to meet our assessment obligations with the reporting-requirement burden on power plant owners/operators. The Energy Commission will create a database reviewing process to facilitate compliance with power plant characteristics reporting requirements as outlined in **Appendix B**.

A feature of the current self-generator reporting requirements are retained and expanded. At present, utilities are required to report certain data about every power plant interconnected to the distribution system. All facilities greater than 10 MW have historically reported these data using CFM forms. The requirement will be expanded to the entire population of generators, irrespective of size. This approach, however, further aligns the Energy Commission with the EIA's approach. EIA reporting requirements already place this obligation on the utilities. Therefore, the staff will use this database to identify generation facilities, and in the case of very small ones, to substitute for direct reporting.

Capacity Group 1: Power Plants With A Capacity Of Less Than 1 MW

No direct reporting requirements. The Energy Commission's need for routinely-reported information on these facilities can be satisfied by an expansion of the current obligation of utilities to provide data on interconnected generators. Currently, utilities report on facilities 10 MW or larger. All interconnected facilities, regardless of size, will be reported.

Capacity Group 2: Power Plants With A Capacity Greater Than 1 MW And Less Than 10 MW

Relevant portions of the staff's database will be sent to power plant owners and any changes to these data should be reported during the biennial database update process. For this capacity group, these data are all the plant identifiers and operating data items 2a, b, c and d from **Table 4**.

Table 4
List of Power Plant Characteristics Variables

1. Power Plant Identifiers
a Name
b Location
c Ownership
d Name plate capacity
e Date installed
f Estimated retirement date
g Unit type
2. Plant Operating Data
a Type of fuel used
b Dependable capacity
c Thermal capacity
d Full capacity heat rate
e Equivalent forced outage rate
f Maintenance schedule or MOR
g Ramp rate
h Cold start-up time
i Warm start-up time
j Warm start-up energy
k Minimum down time
l Minimum up time
m Hydro unit data
n Pumped storage unit data
o Contract type (QF, RMR, etc.)
3. Operation and Maintenance (O&M) Cost
a Variable O&M
b Fixed O&M
4. Fuel Price Data
a Fixed and variable prices
b Dispatch price
5. Emission Factors (refer to Table 7 for specific emissions)

Capacity Group 3: Power Plants With A Capacity Greater Than 10 MW And Less Than 50 MW

Relevant portions of the staff's database will be sent to power-plant owners and any changes to these data should be reported during the biennial database update process. In cooperation with industry, staff will develop estimates for power plant operating characteristics (**Table 4: 2a-n**), and operation and maintenance cost (**Table 4: 3a-b**)

needed for analyses of facilities in this size range. Fuel-price data estimates will be developed using information provided by generators on new forms, such as the illustrative samples shown in **Appendix D**. Overall reporting requirements are summarized in **Table 5**.

Table 5
Reporting Requirements for Generators 10 - 50 MW

Variable	Who is Responsible	Where Else Data Is Reported	How to Report to the Energy Commission
Plant Identifiers	Generators	EIA	Biennial Update of CEC Form
Operating Data	Generators	EIA	No Reporting Required
O&M Cost	Staff	Estimates	No Reporting Required
Fuel Price Data	Generators	EIA	Biennial Reporting on Simplified CEC Forms
Emission Factors	Staff	Estimates or AQMDs	No Reporting Required

Capacity Group 4: Power Plants With A Capacity Greater Than 50 MW

Relevant portions of the staff s database will be sent to power plant owners and any changes to these data should be reported during the biennial database update process. For power plants 50 MW or greater, the Energy Commission will collect plant-specific data as shown in **Table 6**.

Table 6
Reporting Requirements for Generators >50 MW

Variable	Who is Responsible	Data Reported Elsewhere	How to Report to the Energy Commission
Plant Identifiers	Generators	EIA, PX, ISO	Biennial Update of CEC Form
Operating Data	Generators	EIA, PX, ISO	Biennial Update of CEC Form
O&M Cost	Staff	EIA, PX, ISO	No Reporting Required
Fuel Price Data	Generators	EIA	Biennial Reporting on Simplified CEC Forms
Emission Factors	Staff	AQMDs	No Reporting Required

Plant Identifiers

The Energy Commission will collect power-plant identifier information for generators in this size category (**Table 4: 1a-g.**)

Operating Characteristics

The Energy Commission will require that power plant owners report operating data in **Table 4: 2a-o**. These variables are needed for modeling the interconnected system of power plants serving California.

Fuel Supply and Costs

The Energy Commission will collect historical fuel-price data. Beyond this historic fuel-price data, the Energy Commission will collect additional information to allow staff to estimate future fuel prices and eliminate the reporting of forecasted fuel prices by utilities. The specific information required is information on which generic prices are used to make dispatch decisions for the facility and the source of its natural gas supply, and will be reported using new forms that staff will develop. Illustrative samples of forms which could be relied on to estimate fuel prices are shown in **Appendix D** and provide a very simplified reporting mechanism. The facility operator will simply check relevant boxes and fill in appropriate percentages.

For some near-term analyses and locational-impact assessments, a separate natural-gas-price forecast for each generation location will be needed. In order to be able to prepare an individual price forecast for each generation site being studied, it is necessary to have an estimate of the supply mix coming from each supply source. A simple table will be devised where the facility operator would check off the range (in percent of supply from each source) expected to take place in the next five years. The Energy Commission will use its supply price forecast (weighted by the facility operators' supply factors) and transportation and distribution costs to forecast the individual prices.

GENERATION AND FUEL USE DATA REQUIREMENTS

The Energy Commission's specific requirements for historic generator-output, fuel-use, and fuel-cost reporting requirements are described below. Much of the generator-output and fuel-use data are reported to the Federal Government on various EIA forms. An overview of the reporting requirements is shown in **Table 7**. The discussion also identifies compliance options by capacity group. Where there are differences between EIA reporting requirements and the Energy Commission requirements, the differences are discussed.

Included is a comparison of these requirements to those established by the EIA. The EIA has extensive generator reporting requirements. In the past, there have been some differences between Energy Commission and EIA requirements. As a result of the changes made by the Energy Commission, and changes now in progress by EIA, there will be few differences. The Energy Commission notes that in providing a compliance option that entails the filing of EIA forms in lieu of Energy Commission forms, the frequency of filing must at least match the Energy Commission's requirements.

Table 7
Overview Of Proposed Generation And Fuel Use Data Reporting Requirements

Generator Size	In-State Facilities	Reporting Requirements	Electricity Production	Fuel Use and Cost
< 1 MW	425	None	None	None
1 —10 MW	275	Data elements	Annual net generation, capacity at peak demand, and sales to others (by SIC code for a subset)	Annual fuel use by fuel type
		Data unit	By unit	By unit
		Frequency	Annual	Annual
		Change in reporting burden	New State requirement for self-generators, most QFs, and utility-owned facilities, but only a minor incremental burden over existing Federal requirement	New State requirement for self-generators, most QFs, and utility-owned facilities, but only a minor incremental burden over existing Federal requirement
10 —50 MW	275	Data elements	Monthly generation, capacity at peak demand, and sales to others. (by SIC code for a subset)	Monthly fuel use by fuel type
		Data unit	By unit	By unit
		Frequency	Quarterly	Quarterly
		Change in reporting burden	New State requirement for pure QFs and utility-owned facilities, but only a minor incremental burden over existing Federal requirement	New State requirement for pure QFs and utility-owned facilities, but only a minor incremental burden over existing Federal requirement
>50 MW	209	Data elements	Monthly generation, capacity at peak demand, and sales to others. (by SIC code for a subset)	Monthly fuel use by fuel type Monthly fuel cost by fuel type
		Data unit	By unit	By unit
		Frequency	Quarterly	Quarterly
		Change in reporting burden	New State requirement for pure QF or individual utility facilities, but only a minor incremental burden over existing Federal requirement	New State requirement for pure QF or individual utility facilities. Fuel use is only a minor incremental burden over existing Federal requirement, but fuel cost is an increase for non-utility generators.

Capacity Group 1: Power Plants With A Capacity Of Less Than 1 MW

There is no change in reporting requirements for this group. No power plant with a capacity of less than 1 MW will be required to report information directly to the Energy Commission. The only source for information on generation by this capacity group will be QFER Form 2A (Monthly Utility Purchases From Non-Utilities). This form is filed quarterly by those utilities in the State which purchase generation from this capacity group.

Capacity Group 2: Power Plants With A Capacity Equal To Or Greater Than 1 MW And Less Than 10 MW

All power plants with a capacity equal to or greater than 1 MW, and less than 10 MW, will file the following information annually on a unit by unit basis:

- Annual generation
- Capacity at system annual peak demand
- Annual sales to others
- Annual fuel consumption

The Energy Commission approach calls for a change in the current filing status of this group. Currently, the Energy Commission does not require non-utility power plants in this capacity group to file any information directly. Non-utility generators do, however, report to the EIA.

These requirements include provisions for filing copies of the appropriate EIA forms as a compliance option for both utility and non-utility generators. This option results in a minimal increase in reporting burden for non-utility generators and reduces the reporting burden for utilities.

QFER Form 11 (Non-Utility Use Of Generated Electricity) and QFER Form 12 (Non-Utility Use Of Fossil Fuels) will be combined and modified to include an annual data column and be renamed to apply to both utility and non-utility power plants. This capacity group, regardless of ownership, will be required to file this modified form annually. As a compliance option, the Energy Commission will accept EIA Form 759 (A Monthly Power Plant Report Filed Annually For Generation Of This Size) or EIA 860B (Annual Electric Generator Report - Non-Utility) for purposes of meeting the reporting requirement.

Capacity Group 3: Power Plants With A Capacity Equal To Or Greater Than 10 Megawatts And Less Than 50 MW

All power plants with a capacity equal to or greater than 10 MW, but less than 50 MW, will be required to file quarterly on a unit-by-unit basis:

- Monthly generation
- Capacity at system monthly peak demand
- Monthly sales to others
- Monthly fuel consumption

The Energy Commission's approach calls for a change in the current filing status of this group. Currently, only those non-utility generators which burn fossil fuels, or do not sell all of their output to an electric utility, presently file QFER Form 11 with the Energy Commission (see **Appendix A**). This change will result in an increase in the number of non-utility generators filing with the Energy Commission. This proposal also includes provisions for filing copies of the appropriate EIA forms as a compliance option for both utility and non-utility generators. This option results in a minimal increase in reporting burden for non-utility generators and reduces the reporting burden for utilities.

For utility-owned generation, the minimal increase in the reporting burden is a disaggregation of the information already filed quarterly. If this recommendation is followed for utility generators in Capacity Groups 2, 3 and 4, the need for QFER Form 1 (Electric Utility Monthly Generation Resources) and QFER Form 3 (Electric Utility Monthly Use Of Generation Fuel) is eliminated.

QFER Form 11 and QFER Form 12 can be combined and renamed to apply to both utility and non-utility power plants. This power plant group, regardless of ownership, will be required to file this modified QFER form quarterly. As a compliance option, the Energy Commission will accept EIA Form 759 (a monthly power plant report filed annually for generation of this size) or EIA Form 860B (Annual Electric Generator Report —Non-Utility) for purposes of meeting the reporting requirement. In providing this option, the frequency of filing must at least match the Energy Commission's requirements. For EIA Form 759, the three monthly submissions may be sent to the Energy Commission each quarter, or they may be sent individually each month when sent to EIA.⁴ However, using EIA Form 860B as a format for Energy Commission reporting does not reduce the need for quarterly filings.

Capacity Group 4: Power Plants With A Capacity Greater Than 50 MW

All power plants with a capacity equal to or greater than 50 MW will be required to file the following information quarterly, on a unit by unit basis:

- Monthly generation
- Capacity at system monthly peak demand
- Monthly sales to others
- Monthly fuel consumption
- Monthly fuel cost, with a one-quarter delay in filing deadline.

The Energy Commission's approach calls for a change in the current filing status of this group. The approach also includes provisions for filing copies of the appropriate EIA forms as a compliance option for both utility and non-utility generators. This option results in a minimal increase in reporting burden for non-utility generators and reduces the reporting burden for utility generators.

QFER Form 11 and QFER Form 12 will be combined and be renamed to apply to both utility and non-utility power plants. In addition, a row for monthly fuel costs will be added. This power plant group, regardless of ownership, will be required to file this modified QFER form quarterly.

For non-utility power plants, EIA Form 900 (filed monthly) in combination with EIA Form 860B (filed annually) will be accepted as a compliance option for purposes of meeting the filing requirement for the Form 11 part of the modified form.⁵

For non-utility power plants, EIA Form 860B will be accepted as a compliance option for purposes of meeting the filing requirement for the Form 12 part of the modified form.⁶ Monthly fuel cost information for non-utility power plants must be filed on the modified QFER form because no other form is used to collect information on non-utility generator fuel costs.

For utility power plants, EIA Form 759 (a Monthly Power Plant Report) and EIA Form 767 (Steam-Electric Plant Operation and Design Report filed annually) will be accepted as a compliance option for purposes of meeting the filing requirement for all parts of the modified QFER form except the monthly cost of fuel which can be satisfied by filing FERC Form 423.

Generator Submission of SIC Sales Data

The generator-production and fuel-use reporting requirements include aggregate sales by four-digit Standard Industrial Classification (SIC) code. SIC classification and reporting is required only for the following private sales cases: through-the-fence sales to industrial or commercial facilities sharing a common property line with the generating facility; sales to end-users within an islanded, non-interconnected distribution system (such as a distributed generation industrial park); and self-consumed generator output would be classified by SIC code of the primary business activity of the facility where the generator is located.

Sales to wholesale entities such as the ISO, the PX, or a municipal utility need not be classified by SIC code, because no retail transaction takes place. Bilateral contract sales to direct access end-users need not be reported by end-user SIC code because such sales will be reported by the retailer and/or the distribution utility.

Since 1991, each self-generation facility with at least 10 MW of capacity has filed data on generator output, on-site electricity consumption, net peak generator output, electricity sold to private parties and fuel use by SIC code. However, facilities that have the same SIC code and were located in the same electric- and gas-utility service areas could aggregate their filings. In addition, electric utilities provided estimates of on-site electricity consumption by SIC code for self-generation facilities less than 10 MW.

In its September 1998 report, Energy Commission staff identified the level of self-generated electricity consumption for selected years from 1980 through 1996. **Table 8** shows that self-generation has increased to 19.4 percent of total industrial electricity consumption over this period. For the Energy Commission to have a basic understanding of the important link between electricity consumption and the broad categories of economic activity, it is necessary to have generator data by SIC code for the industrial facilities.

Table 8
California Total Self-Generation of Electricity Consumption
(percent)

Year	Residential	Commercial	Industrial
1980	0.0%	0.0%	2.1%
1984	0.0%	0.5%	4.7%
1988	0.0%	1.6%	12.6%
1992	0.0%	1.8%	15.0%
1996	0.0%	2.0%	19.4%

Table 9 Illustrates the importance of self-generation in certain industries, especially those with high thermal requirements, and cogeneration is the technology of choice. The Energy Commission would not be able to perform industry-specific assessments without this information on self-generation and private sales. Such assessments include:

- Demand forecasts.
- Energy efficiency opportunities linked to specific process technologies that are industry-specific.

Table 9
California Electric Consumption in 1996 For Specific SIC codes
(million kWh)

SIC	Industry Description	Self-Gen. Consumption	Utility Sales	Total Consumption	% of Self-Gen.
261	Pulp Mill	168	55	223	75.3%
263	Paperboard Mill	390	129	519	75.1%
291	Petroleum Refining	5,102	2,420	7,522	67.8%
206	Sugar	164	141	306	53.7%
13	Oil/Gas Extraction	1,583	2,636	4,219	37.5%
28	Chemical	1,160	2,467	3,627	32.0%
24	Lumber	403	966	1,369	29.4%

Industry Specific RD&D Opportunities

In addition, the Energy Commission currently supports EPRI research targets in 1998/1999 that include several industry-specific activities. SIC code data is necessary to quantify the impact on the industry if the technologies being investigated were successfully deployed.

Currently, there are approximately 100 entities reporting to the Energy Commission as self-generators (10 MW or larger). Most industrial facilities already know their own SIC code classification since it is a common way of identifying its own activities in the context of business statistics identifying the size of the overall industry and the competition. Few, if any, generators are currently reporting private, through-the-fence sales where they would have to classify an operation other than their own. In some instances, staff has assisted gas marketers in identifying the SIC code of their end-use customers, since there is an already existing requirement that they report sales by SIC code. The Energy Commission can provide such assistance in identifying SIC codes in the future.

SUMMARY OF PARTIES' COMMENTS

The following is a summary of major issues raised in the parties' comments to the Committee's draft and final proposals. Several themes were presented in the comments, including concerns regarding:

- The costs and/or burdens associated with the proposed data collection requirements;
- The need for the Energy Commission to acquire certain data and the proposed uses for data that parties believe is proprietary or commercially sensitive;
- The ability of the Energy Commission to adequately protect confidential data; and

- The availability of alternative sources for data such as historic data, data from other public agencies (EIA and FERC), and reliance on estimation and statistical sampling techniques.

Southern California Edison (Edison)

Edison supported the Committee's efforts to streamline generation data collection. It further supported the Committee's conclusion that with restructuring, and the change in ownership of generation facilities, continued reliance on utilities for data regarding all of the generation in the State is no longer appropriate. Edison commended the Committee for incorporating in its proposal the principle that entities performing equivalent services should have equivalent data submission responsibilities. Edison raised a concern that validation and enforcement mechanisms used by the Energy Commission, when generators do not comply with data collection, requirements should also provide for equal treatment for all entities. Edison noted that entities should not be excused from complying with specific data collection requirements based on limited staff and resources if data reporting requirements are to be applied on an equal basis as provided by the Committee's principles.

San Diego Gas and Electric (SEMPRA)

SEMPRA commended the Committee's proposal to streamline the reporting requirement on generation data, noting that any reduction in reporting encourages the promotion of competition in the restructured market. SEMPRA agreed with the Committee that operating data on independent generators (or qualifying facilities) should be reported directly to the Energy Commission by the generator instead of from utilities. They continue to have concerns about confidentiality of certain data on price and usage that they believe is extremely sensitive. SEMPRA suggest that use of statistical sampling as an alternative to collection of data, in some cases, would protect such confidential data. However, SEMPRA did state that since it has divested itself of the majority of its generating assets, generators should make their own case for confidentiality of their data.

Independent Energy Producers (IEP)

IEP raised objection to the Committee's proposal to collect power-plant-specific data even on a limited basis (for power plants of 50MW or greater in size) and for limited characteristics when compared with past reporting requirements. IEP contended that the Committee's proposal requests proprietary data from generators in a costly and unwarranted manner. They argued that the collection of proprietary data, which they believe the Energy Commission will not be able to adequately protect, will harm competition and is not justified under restructuring. IEP proposed that instead of collecting actual data, the Energy Commission should rely on statistical sampling, dummy variables, proxies and publicly available data.

The Southern Company (Southern)

Southern raised concerns about providing competitively sensitive information that could be used to their disadvantage by competitors or potentially misinterpreted and used against them in regulatory proceedings. They believe the collection of proprie-

tary data is inappropriate and dangerous because having it in one central location simply provides too much temptation and a real possibility that others will acquire it. In addition, Southern raised concerns that the data the Committee is proposing to collect will not be sufficient to meet its market-monitoring goals. They note that California generators are part of a region-wide electricity market and entities outside California are not required to provide detailed data to the Energy Commission, negating the value of precise data on California generators. Southern suggests that the Energy Commission's mandate to provide mid- and long-term forecasts can be achieved using publicly available information.

Energy Commission Staff (Staff)

Staff filed comments restating the need for continued data collection in order for the Energy Commission to adequately carry out its electricity monitoring and policy-development functions, including electricity-system analysis. Staff conceded in their reply comments that they could use generic values by technology type for plants less than 50 MW as long as these smaller plants are not the marginal generators most of the time, as asserted by IEP.

However, staff argued that the Committee correctly concluded that estimated values for power-plant-specific characteristics for generators greater than 50 MW (e.g. block heat rates, O&M costs, and fuel costs) would be inadequate to accurately analyze regional, zonal or location specific impacts for the electricity system. This conclusion was based on system-simulation studies contained in the record of the proceeding. Staff argued these inputs are essential for the Energy Commission to conduct credible and defensible analyses to examine emissions, transmission congestion, reliability and other issues critical to the State. Staff further argued that parties had overstated the ability of the Energy Commission to rely on estimation, statistical sampling and publicly available data.

Mammoth

Mammoth applauded the Committee's attempt to use existing reports to other agencies as sufficient substitutes for CEC forms in conducting data collection. However, they did note that because of differences in frequency and reporting requirements for other agency forms, the Committee's proposal results in an increase over their existing reporting requirements that they estimate would increase reporting burdens by 1200 percent over current reporting requirements.⁷

ENERGY COMMISSION RESPONSE TO PARTIES' COMMENTS

The Energy Commission presents its responses to the four major themes outlined above in the following discussion. The Energy Commission would like to preface its responses with the following comments. The Energy Commission and parties to the proceeding have worked long and hard over the last two years to arrive at final decisions on generator data collection. The Energy Commission acknowledges the active and thoughtful participation of the parties in this proceeding and the significant

contribution they have made to the development and refinement of the Energy Commissions generator data reporting requirements. In particular, parties input helped the Energy Commission establish guiding principles for this proceeding which form the foundation and justification for the approach contained in this report. Parties also helped the Energy Commission identify estimation techniques and compliance options that will reduce overall data reporting burdens.

The Energy Commission had to make difficult decisions with which all parties are not in complete agreement. The Energy Commission has been very sensitive to concerns raised by parties and has made every effort to minimize costs and burdens associated with data collection, while at the same time protecting commercially sensitive data. This includes additional changes in the Committee's draft proposal to accommodate parties' concerns as summarized above and described in the following sections. In the end, the Energy Commission, a public interest decision-making body, believes its requirements will provide sufficient data to allow it to carry out its mandated responsibilities. The Energy Commission believes its new approach has struck an appropriate balance of the competing interests represented in this proceeding.

Costs and Burdens of Proposed Data Collection

Several parties including IEP, Southern and Mammoth raised concerns about the costs and burdens associated with complying with the Committee's data collection proposal outlined in the April 28, 1999 Draft Report. Parties alleged that the Committee's proposal was burdensome and costly for non-utility generators and not justified in a restructured market. One difficulty for the Committee in dealing with issues of burdens and costs is that many of the parties' complaints were generic in nature and largely unsupported in the record.

Several parties, primarily independent generators, who oppose all of portions of the Committee's draft proposal appear to be comparing the proposed data collection requirements against a "no project" or "no data collection" alternative. The Committee noted that some parties appeared to believe that the Energy Commission had before it the option of collecting no data whatsoever from independent generators. In that context, parties then asserted that the Committee's proposal was costly and burdensome because any direct data collection imposes some costs and burdens.

This ignores the Energy Commission's need for, and jurisdiction to, collect data from new market participants. It also ignores the innovative features contained in the Energy Commission's approach to streamline and reduce overall reporting requirements. The Energy Commission believes a more appropriate comparison for burdens and costs is against the existing reporting requirements under QFER and CFM. From this perspective, the Energy Commission's approach represents a major streamlining of existing data requirements that are largely ignored by parties in raising objections based on costs and burdens.

To require no data from independent generators, as some parties have suggested, would violate the guiding principles of this proceeding. Opponents of the proposal have mistakenly given over-riding importance to what they term as the least cost and least burden principle previously adopted by the Energy Commission for this proceeding. The Energy Commission adopted several additional principles that are largely ignored by parties who opposed the Committee's proposal on the grounds of costs and burdens. The costs and burdens must also be considered along with the principles of efficient, equitable and cost-effective methods, not just for market participants, such as the independent generators, but also for other parties and the Energy Commission staff. The principle of entities performing equivalent functions or delivering equivalent services should have equivalent data submission responsibilities, also ignored by parties objecting to any direct data collection. The Energy Commission believes its proposal strikes the appropriate balance between these principles.

The Energy Commission notes that its proposal for collecting data on power plant characteristics involves shifting the primary burden for data collection to its staff. Under this approach, the staff will develop a database for each generator, using existing data. Staff will generate a customer report that will be sent to each generator every two years. All that will be required for the generator is to update this report to reflect any current or known changes to the power plant characteristics provided by staff. Using the revised reports, staff will update its power plant characteristics database. The Energy Commission reiterates its original assertion that this biennial update process significantly reduces burdens on UDCs from existing reporting requirements, while simultaneously placing only minor data collection responsibilities on independent generators. The Energy Commission has outlined, in a later section of the report, additional changes to its power plant characteristics proposal that will further reduce reporting burdens on generators and shift additional responsibilities to staff.

The Energy Commission notes that for generator output- and fuel-use data, because of the compliance options of filing EIA data to meet much of this requirement, the filing burden was negligible. The Energy Commission acknowledges parties comments that its approach increases the frequency of the filing of generator output- and fuel-use data, for generators 10 MW or larger in size, over what they currently file with EIA and/or FERC. However, the Energy Commission is not persuaded that its requirements are overly burdensome or costly.

Need for Proprietary or Commercially Sensitive Data

Several parties, particularly IEP, contended that the Committee's proposal to collect proprietary operational and cost data from generators imposes undue costs and competitive risks to generators with no countervailing public benefits. IEP further asserted that the Committee's Draft Report (April 28, 1999) failed to demonstrate the necessity for collecting data and how these data meet the Energy Commission objectives of market monitoring, trends assessment and policy development. In the previous section, the report addressed issues of costs and burdens. The remainder of this discussion deals with need for the data.

The Committee's draft report clearly states the need for data is to support the Energy Commission's role and functions of market monitoring, trends assessment and policy development.⁸ The Committee report lists several important assessment activities for which the Energy Commission is responsible. These include the need to inform the Governor, Legislature, and the public about the mid- and long-range outlook for the electricity industry and the impact of future demand and supply trends on the economy, the environment, and public health and safety. In addition, the Energy Commission serves as an early alarm system for identifying emerging problems and opportunities. Numerous other analytical activities are outlined in an earlier section of this report and in both staff's comments and reply comments.

Some parties suggested, in comments and in verbal testimony, that the Energy Commission's proposed role in market monitoring is duplicative of market surveillance efforts already underway at the ISO, PX and Electricity Oversight Board and are, therefore, unnecessary. The Energy Commission notes that its role in market monitoring may have been misunderstood by parties to the proceeding. Market surveillance to identify gaming and bidding strategies, or other behavior that would be considered abuses of market power in the day-to-day operations of the market, are clearly within the purview of the previously mentioned entities. The Energy Commission has no interest in duplicating such efforts and is not proposing to do so. Rather, the market monitoring activities envisioned by the Energy Commission have more to do with mid- to long-range issues not being addressed by other entities in the market, nor by a public-policy body.

With respect to the challenge regarding benefits, the above-mentioned activities provide obvious benefits to the people of California and the decision makers who must act on their behalf. These benefits include:

- Determining whether State policies are being implemented and whether the benefits of restructuring are being realized by consumers;
- Providing objective, credible information to help reduce uncertainty for market participants and enhance consumer choice; and
- Ensuring the Energy Commission public purpose programs (energy efficiency, renewables, and R&D) are successful in the restructured market.

Some parties may object to the Energy Commission's intent to continue electricity system analysis activities or to the roles the Energy Commission has endorsed. However, the Energy Commission concludes that parties' contention that the report fails to substantiate the need for data has little, if any, merit. The Energy Commission is convinced that the public benefits justify the data collection that is required.

As to the Energy Commission's decision to collect data that parties contend is commercially sensitive or proprietary, the Energy Commission is convinced that, in some **limited** cases, proprietary information is necessary for the Energy Commission to carry out its mandated functions. The fact that information is competitively sensitive does not relieve market participants from the obligation to provide information needed

by State and/or Federal agencies to perform their functions. In fact, the Legislature has adopted a statutory scheme in the Public Records Act that allows State agencies to conduct their business while protecting confidential data. These protections negate the possibility that sensitive data will be obtained by others to the detriment of competitors or the market as a whole.

The fact that these mechanisms are effective in enabling State agencies to both use and protect confidential data is confirmed by the long history the Energy Commission has in collecting confidential data —under QFER, PIIRA, and other regulatory programs — without release. The Energy Commission made every effort to minimize the amount of confidential data it will collect to only that which is absolutely essential to meet its responsibilities. The Energy Commission is also committed to additional efforts to assure that any commercially-sensitive information collected by the Energy Commission will not be released to the detriment of any party. These efforts are described in the following section.

Adequate Protections for Confidential Data

Several parties have suggested that the Energy Commission cannot adequately safeguard against the release of data to competitors. They argue this creates a risk of harming competition that is ultimately to the detriment of consumers. IEP argued that the Energy Commission may be required by rule or law to divulge confidential or proprietary information if and when the data or information is used as the underpinnings to a Commission policy decision in the future. IEP further argued that interested parties will not necessarily accept black box analyses as the underpinning of Energy Commission decision-making.

The Energy Commission has already addressed the statutory scheme that is in place to protect confidential data and believes there are appropriate restrictions to prevent disclosure of data. If a situation arises in which a proposed Energy Commission policy decision rests upon confidential data, the Energy Commission will be obligated to weigh the interests of the information holder against the public interest to decide on the appropriate treatment for confidential data. This weighing of interests could result in a range of measures being imposed, depending on the nature of the proceeding, the role of the data in supporting the decision, and the types of interests affected. Many government bodies have procedures in place to address just these situations, as pointed out by California Cogeneration Association during the proceeding. The Energy Commission can protect confidential data by a number of available measures. For example, confidential data can be protected by conducting closed hearings, protective agreements, as well as by denial of access.

The decision about which measures, if any, to impose, will necessarily be dependent upon the facts of the specific situation. For example, a competitor who seeks confidential data submitted by a market player in an Energy Commission proceeding might be denied access to information. On the other hand, another participant representing an environmental interest may not be denied access if a confidentiality agreement is signed. Similarly, an individual's right to access information in a

rulemaking proceeding may be accorded much less weight than that of a licensee seeking information relevant to a license revocation proceeding.

The Committee is confident that the Energy Commission can and will weigh the competing interests and impose appropriate restrictions to balance the interests of the participants in the proceeding. The concern that the Energy Commission may, at some point in the future, make the wrong decision about the appropriate balance of interests is not the determinant of what data the Energy Commission should collect. The Energy Commission's needs for data to meet its mandated responsibilities is the appropriate determinant of what data to collect.

Parties have raised concerns about the current Energy Commission Confidentiality Regulations and the provisions for disclosure. In this proceeding, staff has already suggested that the Energy Commission should develop language for blanket confidentiality designation and disclosure for both generator and consumer data. Staff has also indicated that the Energy Commission could benefit from the review of current protocols and the development of additional internal procedures for handling confidential data. The Committee agrees that the Energy Commission's ability to adequately safeguard confidential information is of paramount importance not only to the parties to this proceeding, but to the Energy Commission as a whole.

As a result, the Energy Commission proposes that a parallel process be initiated to revise its confidentiality regulations, along with the development of data collection regulations. This would allow the Energy Commission to establish blanket confidentiality protection for appropriate data elements, alleviating the need for parties submitting certain categories of data to make case-by-case arguments for trade secret protections and disclosure rules and methods. The Energy Commission also proposes to initiate an internal review of staff's confidentiality procedures to eliminate any potential flaws and identify opportunities to improve existing practices. With these additional efforts, the Energy Commission is convinced that it is doing everything within its power to assure that confidential data is adequately protected.

Use of Alternative Sources for Data, Estimation Techniques and Statistical Sampling

Several parties suggested that the Committee should rely on alternative sources of existing and historic data, use estimation techniques and perform statistical sampling to obviate the need for direct data collection by the Energy Commission. The Committee agrees with parties that these approaches to data collection are valid and has incorporated numerous such features in its proposal. The Committee has already identified numerous areas where the filing data submitted to other agencies, particularly EIA, will serve as compliance options for meeting Energy Commission data collection requirements. The Committee also incorporated estimation techniques for fuel price forecasts and power plant characteristics for generators less than 50 MW in size. Based on additional investigation into the use of estimation techniques and alternative sources of data and parties comments at the final hearing, the Committee

has identified some additional areas where changes to its original proposal are warranted, as described in the following section.

However, in suggesting that these approaches are a substitute for **all** data collection, parties have misunderstood the Energy Commission's intent in supporting these alternative approaches. While the Committee agrees with the use of estimation techniques for some discrete data elements, the Energy Commission has not made a wholesale endorsement for this approach in lieu of direct data collection. IEP's assertion that estimation is a preferred approach to direct data collection, and should be applied as a guiding principle, fails to acknowledge the principles already adopted for this proceeding, as addressed in an earlier discussion. The Energy Commission believes it has made every effort possible to minimize direct data collection under its approach and to rely on alternatives where they meet the needs for data.

CHANGES IN RESPONSE TO PARTIES' COMMENTS

Based on comments of parties and additional deliberations on issues raised at workshops and hearings, the Committee proposed several changes to its April 28, 1999 proposal for generator data. These changes and the rationale behind them are presented in the following discussion. The changes involved the following issues:

Power Plant Characteristics

- Collect heat rates at full capacity, rather than by block, for power plants 50 MW or larger in size.
- Use estimation techniques to determine Operating & Maintenance costs for power plants 50 MW or larger in size.
- Use estimation techniques, in cooperation with air quality regulatory bodies, for emission factors for power plants 50 MW or larger in size.
- Generator Output and Fuel Use
- Collect historic fuel costs for power plants 10-50 MW and 50MW or larger in size with a one-quarter delay in the filing deadline to provide additional safeguards for this commercially-sensitive data.

Parties contended that production-cost modeling based on marginal-cost theory was not appropriate considering the restructured nature of the market. In addition, parties contended that the precision being sought by staff in requiring specific variables such as heat rates, O&M costs, and fuel costs was unrealistic and not necessary to support the Energy Commission's functions. Parties further argued that the Energy Commission staff was proposing to simulate the actual bidding strategies of each generator in the State and IEP argued that observation of market results showed no correlation between marginal costs and bidding strategies.

The Committee agreed with IEP's comments, in part, but concluded that the production cost modeling based on marginal cost theory has an appropriate place in analyzing the restructured market. Model results can be used to compare realized market prices in order to measure economic efficiency. The results can also be used to assess resource sufficiency and whether investments in transmission and generation are supported by market clearing prices. In addition, model results allow the Energy Commission to examine the following: price differences among regions; mid- to long-term reliability; transmission congestion by region; emissions by region; cost effectiveness of energy efficiency measures and investments; and cost effectiveness of renewables and PIER mandates. The Committee further noted that academics, consultants and FERC rely on marginal-cost approaches, similar to the staff's, in analyzing the electricity market.

Marginal-cost approaches may not be sufficient to approximate bidding behavior in the restructured market and market results. So far, market behavior and clearing prices would appear to bear this out. Marginal-cost based models, such as those currently used by staff, have value in assessing some electricity system and market issues before the Energy Commission. However, additional tools and expertise will need to be developed as part of an overall scheme to gain a better understanding and assessment capability of electricity market conditions and behavior. The Committee proposed the following changes with respect to power plant characteristics. These changes are adopted by the Energy Commission.

Heat Rates

The requirement from the draft proposal that generators file heat rates by block (four points on the heat rate curve for each facility) for generators 50 MW and larger is eliminated. Instead, generators in this size category will file a heat-rate value at full-rated capacity (heat rate at 100% capacity factor) consistent with current reporting requirements at EIA. As new facilities are permitted through the Energy Commission's siting program, the facility owners will be required to supply the Energy Commission staff with a heat-rate curve and expected heat-rate deterioration curve. The heat-rate deterioration data could be based on the manufacturers warranty or other assurances on expected heat rates over the life of the plant. This information, in combination with staff research into deterioration rates for other plants, should be sufficient to allow the Energy Commission to model the electricity system with an adequate level of accuracy.

Several parties suggested the use of average heat rates in lieu of block heat rates as sufficient for the Energy Commission electricity system analysis. To the contrary, staff has argued that block-heat rates are necessary inputs to the staff's production-cost models for the electricity system. To help resolve this conflict, the Committee requested staff to conduct an analysis of the effect of heat rates on modeling results. Staff argued, based on the results of that analysis, that the use of average heat rates would eliminate the Energy Commission's ability to model the electricity system at sub-regions of the State with a high level of accuracy. In its analysis, staff further

argued that heat rates move up and down by generator and by generation level at specific facilities, depending of the level of maintenance. They noted that heat rates also vary based on the degree of deterioration or refurbishment and geographic locations i.e., the same unit would be more efficient in a cold environment than a warm one, or if properly operated and maintained rather than receiving less attention.

One of staff's primary concerns with estimating heat rates, based on the development of deterioration curves or other estimation techniques, relates to the existing population of older power plants. Staff argued that information on deterioration rates for these older facilities are not readily available and the variation in these facilities, and where they are in their cycle of deterioration or refurbishment, makes estimation of heat rates highly speculative. The Committee agreed that it may be problematic to estimate heat rates for these generators. However, the Committee noted that planned refurbishments and turnover in this population of generators will make this less of a problem over time. Furthermore, the variation in historic heat-rate data used in staff's analysis of the impact of estimated heat rates on statewide and regional analysis could not be readily explained or correlated to specific operating changes, changes in equipment or refurbishment, or other factors. This led the Committee to question the validity of heat-rate values and their impact on model results.

Ultimately, the Committee was not convinced that the loss of block heat-rates would significantly jeopardize the ability of staff to conduct system modeling, even at a regional level. The Energy Commission believes staff can develop the necessary expertise in understanding heat-rate-deterioration trends, along with estimation techniques, that will assure its analyses continue to be credible and defensible in the future without the filing of block heat rates by generators.

Operation & Maintenance Costs

The Committee proposed to eliminate the requirement that generators file fixed and variable O&M costs for power plants 50 MW or larger. Instead of actual O&M costs, the staff should develop proxies or estimates for O&M costs for use in modeling. There is no evidence to suggest that the traditional patterns of operation and maintenance, observed in the regulated utility regime, should be expected to continue under deregulation. Power plant owners are finding new methods of acquiring O&M services and paying for O&M costs. These new methods include contracting-out maintenance to lower costs and buying O&M packages from turbine manufacturers. The Energy Commission expects O&M to become competitive services like many other new services in the restructured market, and believes it is important for staff to investigate how O&M services are being provided and costs are being treated in the restructured market to develop better estimation techniques. The Energy Commission believes the use of historic data or proxies should be sufficient to allow it to model the electricity system with an adequate level of accuracy.

Parties argued that estimation or use of proxies for O&M costs would be sufficient for the Energy Commission modeling and electricity assessment purposes. Staff argued that O&M costs were essential in projecting seasonal market-clearing prices. Other

parties argued that O&M costs are not a part of dispatch decisions under the restructured market. Staff noted that both the fixed and variable O&M costs are important in the analysis of price and the viability of generation to sustain the generation market in the near- to long-term time periods. Staff notes that if bidding in the market is based solely on variable costs and many units fail to attract sufficient revenues to survive in the market some units may fail. The market must somehow, between energy payments, RMR contracts, and ancillary service payments, provide sufficient revenues to sustain the generation market.

The Energy Commission agrees that reliance on estimates and proxies in the near term should be sufficient for staff's modeling activities to support electricity system analyses. In addition, staff must begin to develop its expertise and understanding of how O&M services and costs are being handled in the restructured market.

Emission Factors

The Committee proposed to eliminate the requirement in the draft proposal that generators file emission factors for power plants above 10 MW in size. Instead, the Energy Commission staff will actively pursue cooperative arrangements with the California Air Resource Board (CARB) and the regional air quality management districts to acquire emission factors and other emission data necessary to support the Energy Commission's analysis of air quality issues in the restructured market. Staff argued that information on emission factors was necessary to conduct analyses to support attainment planning and other regulatory decisions by air quality regulators that affect the electricity industry. While the Committee supported the continuing efforts of staff to increase the sophistication of air quality analysis and modeling capabilities, the Committee believed that under restructuring, the CARB and the regional districts are a more appropriate source of emissions data for the Energy Commission than are generators.

Staff argued that power plant owners monitor their plant emissions for both internal operating and air quality regulatory purposes. The original Committee proposal described two types of requirements for emission factors—those that do not need to match capacity-block-heat rates and those that do. While staff argued that annual average emission factors were sufficient for the former group, heat-rate-linked emission factors are required for the latter group. Parties representing generators argued that the proposed emission factors were not readily available for use in the normal course of business. IEP, in particular, objected to the filing of emission factors by generators because they involve use of computer models to process large amounts of raw data and make complex, painstaking calculations. They noted that while IOUs presently do this, non-utility generators do not have expertise, or the capability, to conduct these studies and provide the data. The Energy Commission is persuaded that generators, whether IOU or non-utility, should not be required to file power-plant-specific emission-factor data.

Generator Output and Fuel Use

Parties to the proceeding appeared to find acceptable the Committee's proposal for collecting generator-output and fuel-use data, particularly using EIA forms as a compliance option. However, they did question the need for this data on a quarterly basis. Staff argued that quarterly reporting was necessary to allow the Energy Commission to complete certain statutory requirements such as the *Net System Power Report* that must be submitted to the Legislature. The Energy Commission had already stated its intention to produce more timely and relevant information on the restructured electricity market and system than it did in earlier *ER* processes. The Committee shared staff's concerns that if data is collected only on an annual basis, there will be a significant lag in the availability of data to conduct on-going analysis. The Committee believed that the need to conduct more timely and relevant analyses is the primary reason why quarterly reporting should be maintained.

Parties suggested in their comments that the Energy Commission should acquire the necessary data on generator-output and fuel-use from existing data sources, such as EIA and FERC, and historic data in lieu of direct data collection from generators. Staff noted a number of shortcomings in the data sources identified by other parties and the time-consuming and inefficient process this would involve. The Committee was persuaded that it would be very inefficient for staff to search out several possible data sources for the data elements outlined in the Committee's proposal, then download (if available electronically) or acquire hard copies for the nearly 1,000 generators located in the State. The Committee concluded that the original proposal to collect generator-output and fuel-use data directly from generators, with compliance options, is a more efficient method of data collection. However, the Committee proposed one change to the reporting of fuel costs, as follows.

Fuel Costs

A primary area of dispute with respect to generator-output and fuel-use data has to do with the proposed collection of historic fuel costs. Several parties objected to the filing of historic fuel costs on the basis that the information is highly sensitive from a commercial standpoint and is unjustified for the purposes of modeling the electricity system. Staff argued that fuel prices are an extremely important, perhaps the single most important, factor in dispatch decisions by generators. They noted that gas prices for natural gas vary due to supply source and transport costs, which in turn create cost differences in different regions and at different sites throughout the State. Staff argued that using statewide average prices for natural gas, as advocated by generators, would diminish staff's ability to model cost-based dispatch decisions, thus significantly reducing their ability to accurately analyze regional market clearing prices, emissions, and transmission congestion. Staff also noted that while there are some indicators of natural gas prices at certain locations throughout the State, that are reported in trade journals, these prices are not actual costs and instead are based on samples and surveys of gas purchasers, the accuracy of which cannot be readily determined.

The Committee was persuaded that natural gas prices are a vital input to electricity system analyses, as well as to other Energy Commission efforts to forecast and assess natural-gas prices and supply availability under the *Fuels Report* requirements. The Committee noted that it had already proposed to use estimation techniques for natural-gas-price forecasts as part of the power plant-characteristics data, eliminating the need for generators to supply natural gas-price-forecasts. The Committee had previously stated its conclusion that the mere fact that data is commercially-sensitive, does not mean that the Energy Commission should not collect data that is needed. As a result, the Committee concluded that collection of historic fuel prices under the original proposal be retained. However, as an additional safeguard for this commercially-sensitive data, the Committee proposed that there be a three-month lag, or one-quarter delay, in the filing of fuel prices by generators.

END NOTES

¹ Public Resources Code Section 25216.5

² Assembly Bill 1890, Statutes of 1996

³ Under Warren-Alquist Act Sections 25305-8.

⁴ On EIA Form 759 federal regulation provide that data reported on stocks end of the month is confidential. For data treated as confidential by EIA, the Committee notes these data could be masked (if paper filings) or deleted (if electronic) when submitted to the Energy Commission.

⁵ Monthly generation and capacity at monthly peak.

⁶ Monthly fuel consumption.

⁷ Staff's reply comments argue that this is an overstatement of reporting burdens since a large part of the burden is creating and maintaining databases. Once these databases are created, the incremental burden of reporting is minor.

⁸ Ad Hoc Information Committee Report on Generator Reporting Requirements, April 28, 1999, pp. 1-2 and 7-8.

SECTION 2: CONSUMER DATA REPORTING REQUIREMENTS

INTRODUCTION

In this Section, the California Energy Commission (Energy Commission) lays out its approach for collecting essential data from electricity providers on electricity consumption (or usage), consumer (or retail-customer) characteristics, and load research. The data the Energy Commission will collect on consumer information will be used to carrying out its mandated functions of trends assessment, policy development and market monitoring.¹ This approach streamlines and reduces reporting burdens for the industry, compared to practices currently in place.

LEGAL MANDATES

The Warren-Alquist Act mandates the Energy Commission to evaluate the trends in energy supply and demand, statewide demographics and economic factors that would effect the demand and supply of energy; and the social, economic and environmental implications of these trends². As such, the Energy Commission has very broad analysis and data collection authority under the Act to allow it to monitor energy industries and assess long-term trends in order to develop and implement energy policy for the State. The Act requires the Energy Commission to analyze supply and demand for all energy markets and energy products and services including electricity, natural gas, petroleum and petroleum products, transportation and alternative fuels, energy efficiency, and renewables.

In its June 12, 1998 *Report on the Energy Market Information Proceedings*, the Ad Hoc Information Committee (Committee) developed findings of fact and conclusions of law with respect to its jurisdiction and authority for its information-related functions. This report was developed largely to respond to parties' questions and concerns regarding the Energy Commission's authority and jurisdiction in the restructured electricity market. At its June 24, 1998 Business Meeting, the full Energy Commission adopted the Committee's findings and conclusions dealing with the Energy Commission's jurisdiction and authority, as well as its roles and functions in the restructured electricity market.

The Energy Commission concluded that its responsibilities for assessing and monitoring energy market trends and developing energy policies continue to be justified and may become more important as the competitive electricity market emerges. The fundamental public interest rationale for continued assessment and monitoring of the electricity industry are the statewide electric system impacts and environmental impacts associated with electric facilities and the consumption of electricity.

The addition of new power plants and transmission lines directly impacts the operation of other power plants and transmission lines in the interconnected electricity grid, and involves environmental and other impacts that extend beyond the local area where facilities are sited. Energy demand growth, the implementation of energy efficiency measures and demand responsiveness strategies (including load bidding) can also have profound effects on the integrated electricity system. As such, an understanding of these impacts is an essential input to developing informed State energy policies.

The Energy Commission found that while the nature of the electricity industry has changed to rely on market forces and competition, this restructuring, in and of itself, does not eliminate the need for its electricity monitoring and policy development functions. It is important to note that other energy markets have become increasingly competitive over the last twenty years, in particular oil and petroleum products markets. The Energy Commission has continued to monitor trends and assess these competitive markets, has identified major emerging problems and helped to avoid some projected future problems altogether. These activities were supported by ongoing data collection on oil and petroleum markets that provided the information base for analytical studies.

The Energy Commission went on to endorse certain activities, including data collection, that support these core functions and concluded these activities remain important to State decision-makers, consumers and market participants. The Energy Commission concluded that electric industry restructuring does not change the Energy Commission's authority or responsibilities to collect data necessary to carry out its mandated functions. The Energy Commission also concluded that it has ample authority under existing mandates to collect data to support its core functions from new market participants, where appropriate.

Past Data Collection Practices

Since 1976, the Energy Commission has collected natural gas and electricity consumption and revenue data aggregated by categories of end users. The ***Quarterly Fuels and Energy Report*** (QFER) process has been the Energy Commission's primary vehicle for collecting energy consumption and revenue data. The QFER database provides a more uniquely detailed picture of energy consumption than other sources because it disaggregates the consumer categories by the nature of the economic activity at the location. The data supplied under QFER forms the basis for analysis of energy demand in the State.

QFER has chronicled how much electricity and natural gas was consumed on a monthly basis in the State since January 1976 by approximately 1600 different customer categories. The database also details how much those consumers paid for the energy. End uses of electricity and natural gas in the non-residential economic sectors are categorized according to Standard Industrial Classification (SIC) codes that describe various aspects of economic activity for which the energy is consumed. For residential end uses, data is classified into six special subdivisions based on dwelling and meter type. The QFER database includes not only sales to utility customers but consumption by small power producers and gas customers served directly by non-utility suppliers.

QFER data is an essential input to the Energy Commission's demand forecasting and demand analysis activities. Typically, forecasts of energy demand for a specific set of related customer categories rely on estimates of historic, current and future energy use by appliance types and process equipment. To test the plausibility of various forecasting assumptions, demand models are used to prepare back casts of historical consumption that can then be compared with actual recorded consumption.

Historically, this level of detail on energy consumption has allowed comparisons of energy demand patterns among many different types of economic activities. In addition, since geographical data is collected through QFER, research has been possible into relationships between energy consumption and a variety of climatic, economic and demographic variables. These data have also been used to analyze changes in electric and natural gas consumption patterns. QFER data, along with demand side data collected through the Common Forecasting Methodology (CFM), has also served as an essential input to traditional energy planning uses, such as supply and demand balances conducted for past Electricity Reports (ER). CFM data has historically included long range demand forecasts and utility data plans to provide data on consumer characteristics and load research.

The Energy Commission's demand forecasting efforts have been acknowledged as highly accurate and have helped to ensure that California did not follow the excess construction path that many states took. During recent legislative discussions about energy oversight functions and governance, forecasting was broadly supported. In this proceeding, the Energy Commission strove to ensure that data essential to its demand forecasting efforts will continue to be available. At the same time, the Energy Commission is proposing major streamlining to minimize the costs and burdens this may place on the industry.

RESTRUCTURED ENVIRONMENT

Restructuring of the electricity market has resulted in major changes in the demand-side, or consumption, aspects of the market. The introduction of competition in the generation of electricity has created new energy suppliers and products. It has also changed the way electric loads are treated in the market. In the regulated monopoly environment, investor-owned and municipal utilities were the primary agents supply-

ing electricity to end-use consumers. These utilities had an exclusive right to be the sole suppliers of electricity to customers in a specific franchise territory. As such, these utilities were the primary sources of data on electricity consumption and uses in the State. With restructuring, new entities have emerged as retail suppliers and correspondingly have become a source for data on electricity consumption for their retail sales.

Under restructuring, retail electric customers can now choose from competing energy suppliers. New Electricity Service Providers (ESPs) have emerged to serve the needs of electric customers throughout the State. The former investor-owned utilities, now Utility Distribution Companies (UDCs), have retained their obligation to distribute electricity, which remains a monopoly service under the regulated portions of the electricity market. However, they no longer have the exclusive right to sell electricity to end-use customers in a geographic region, or franchise service territory. Currently, they are the default provider of electricity supplies, meaning a customer has to choose a different supplier or the UDC will automatically serve it. [Most municipal utilities have retained their ability to be the sole provider of retail electricity for their service territories under restructuring.]

AB 1890 provided for two types of ESPs that could provide direct-access sales to electric customers. Registered ESPs are required to demonstrate certain capabilities and to disclose terms and conditions of product offerings as a condition of serving the residential and small-commercial market. Those ESPs serving only larger nonresidential customers are not obligated to meet these requirements. Both types of ESPs and UDCs provide comparable retail-energy services to end-use customers. However, UDCs and municipal utilities perform additional distribution functions that are not provided by ESPs.

The new market structure has resulted in changes in the way electric loads are considered. Because each hour of the year is a separate and distinct market, the need for hourly characterizations of customer loads has become increasingly important. In the earlier era of regulated, vertically-integrated monopolies, peak-demand estimates were often sufficient to simulate how hourly variations in usage over a year translated into the highest demand from the connected load on the utility system. Under the rate freeze provisions of restructuring, a succession of hourly load profiles³ are required for billing of all customers and must be ready for use no later than five days after the final day of consumption. Market participants also use load profiles to aid in bidding into the California Power Exchange (PX) or scheduling load into the Independent System Operator (ISO) on an even more rapid turnaround. UDCs use load profiles to develop average PX prices for each customer class as a part of the disaggregated billing requirements of all customers, whether unbundled customers of the UDCs or direct-access customers. Load profiles have become an increasingly important tool in understanding electricity consumption in the restructured market.

It has taken more than twenty years to move the natural gas industry from full regulation to partial regulation. On the Federal side, natural gas wellhead prices are

deregulated and have been for the most part since 1985. The interstate transportation market, while largely still regulated, allows for market-based bidding of unutilized pipeline capacity. Inside California, local distribution utilities have provided transportation services to customers since 1986. Not until 1991 did the CPUC allow utilities to use their interstate transportation capacity rights on behalf of noncore consumers.

California Public Utility Commission (CPUC) actions have permitted natural-gas marketers to sell commodity gas to retail customers, but under different terms and conditions for two broad groups: core and non-core customers. Core customers include residential and small commercial customers that the Local Distribution Company (LDC) retains an obligation to serve. Non-core customers include those who acquired their own supplies from natural gas marketers while continuing to use the LDCs' distribution system. Beginning in 1990, aggregators, or what the CPUC now terms Core Transport Agents (CTAs), were permitted to aggregate core customer loads and to market gas to these groups. As with electricity, natural gas utility LDCs function as the default provider of retail services. However, for natural gas this default function is limited to smaller customers. These entities all function as retailers in the natural gas market since their common service is selling commodity energy to retail, or end-use, customers.

In 1991, core aggregation programs were initiated by the CPUC and established by the three major utilities in California. The programs give core customers an opportunity to transport their own gas if enough of them band together so that their combined gas usage exceeds 120,000 therms in the PG&E territory and 250,000 therms in other service territories. The growth in the core aggregation programs has been slow, accounting for about five percent of the total core-procurement market. These programs have been hampered mostly by the inability of core aggregators to consistently undercut the weighted-average core-procurement price posted by the LDCs during the first week of each month. Further pressure on the ability of the core aggregation program to succeed is the recent passage of Assembly Bill 1421. Assembly Bill 1421 requires each of the LDCs to be the exclusive provider of revenue-cycle services to all customers in its service territory. While allowing core aggregators to provide billing and collection services, and potentially receive a credit for the portion of the rate bundled in utility transportation rates, it precludes core aggregators from providing metering services. As long as these provisions remain in place, the prospects for a significant increase in the level of core aggregation will remain small.

ENERGY MARKET INFORMATION PROCEEDING

In order to bring its data-collection and information-related functions and responsibilities more in line with this restructured industry, the Energy Commission established the Ad Hoc Information Committee and delegated to it three principal tasks:

1. Initiate a rulemaking to amend and delete existing regulations and adopt new regulations relating to disclosure of Energy Commission records (confidentiality regulations);
2. Convene a proceeding to serve as a central forum for the discussion of issues associated with the Energy Commission's data-related responsibilities that may be broader than regulation changes; and
3. Initiate a rulemaking to revise the Energy Commission's data collection regulations.

The Committee prepared revisions to the Energy Commission's confidentiality regulations that were adopted by the Energy Commission on April 15, 1998 and have since been approved by the Office of Administrative Law. The Committee held a series of workshops to address the broader issues of data needs and the necessary changes to data collection regulations in light of electric industry restructuring. Parties raised concerns regarding the Energy Commission's authority to collect data from various market participants and the functions the Energy Commission would perform under restructuring. The Committee's work on the rulemaking was effectively suspended while it deliberated these concerns. The June 12, ***1998 Report on the Energy Market Information Proceeding***, previously referred to, dealt with the primary issues of jurisdiction and functions. On June 25, 1998 the Committee released its ***Scoping Report Describing Resumption of the Rulemaking*** that outlined the scope and timelines for the resumed rulemaking.

The Committee held a series of workshops to review exact data needs and various alternative ways that data needed by the Energy Commission could be acquired. There were a number of active participants in these workshops including representatives from UDCs, ESPs, independent generators, owners of divested generation, and others. Staff prepared a series of issue papers dealing with data needs, methods and uses that were released and discussed at the workshops. In addition, parties filed comments and proposals for the Energy Commission's consideration.

Appendix C outlines the consumer data workshops, staff papers and comments filed by parties in the proceeding.

PRINCIPLES

To guide the data-collection rulemaking, the Committee developed principles, which were endorsed by the full Energy Commission in June 1998. One of the primary goals of the rulemaking was to streamline data collection activities where possible and to develop efficient, equitable and cost-effective methods for acquiring needed data. On the demand side, this means the Energy Commission needs sufficient data to allow it to assess consumer-choice opportunities and pricing influences in the new market structure. This understanding requires data about consumer behavior. The Energy Commission concluded that it also must develop new demand-forecasting capabilities,

to accurately predict load—either for policy analysis or as input to electricity system assessment.

The Energy Commission determined that the function a market participant performs, regardless of whether that entity is a regulated monopoly or private market participant, should dictate what data it supplies. The policy principle underlying this is that entities performing equivalent functions or delivering equivalent services should have equivalent data-submission responsibilities.

For consumption data, the appropriate interpretation of this principle is that retailers, whether utilities (UDCs or municipal utilities) or private providers, should submit comparable information about their sales of energy to end-use customers. It is the energy-retailing function that is common to UDCs, municipal utilities and ESPs in the electricity market. In the natural gas market, LDCs, marketers, and CTAs have the retailing function in common. The fact that utilities have other functions within the industry that retailers do not perform does not diminish the equivalence of the retailing functions they do share. The Energy Commission also believes that under this principle utilities may continue to be obligated to provide certain information and data based on their electricity and natural gas distribution functions. Retailers would not be required to provide such distribution-related information because they do not perform these functions.

ASSESSMENT ACTIVITIES AND USES FOR CONSUMER DATA UNDER RESTRUCTURING

As outlined in previous Committee reports, the Energy Commission conducts analytical activities to support three primary functions relevant to this proceeding: trend assessment, policy development and market monitoring. These activities are carried out as part of the Energy Commission's broad assessment authority under the Warren-Alquist Act. The purpose of the Energy Commission's analytic activities is to inform the Governor, Legislature and the public about the mid- and long-term outlooks for the energy industry and to develop robust strategies under a range of future scenarios. In addition, these analytic activities provide for the early-warning system for impending or potential problems in the energy industry. This involves examining the impact of future demand trends on the economy, the environment, and public health and safety. This information forms the foundation on which policy makers can address important energy issues facing the State and establish sound energy policy.⁴

To support these analytical activities, the Energy Commission collects data and develops accurate information on current and historic electricity consumption and end-use customers. The Energy Commission's new approach focuses on historic data describing what energy consumers use, what factors influence the amount of consumption, and what options consumers had available to choose from (when they made decisions about their provider and levels of consumption). In addition to historic data, the Energy Commission has outlined data needs for developing long- and mid-

range forecasts. These forecasts require projections of variables including data on consumer characteristics and load research data.

Data on energy consumption, consumer characteristics, and load research is the primary information the Energy Commission uses to identify trends in consumption and utilization of energy, and to evaluate the impacts of these trends. These assessment activities provide the foundation for policy recommendations relating to energy demand. In the restructured environment, these data allow the Energy Commission to evaluate the performance of the restructured market in comparison with policy makers' expectations outlined in AB 1890 and SB 477.⁵ Assessment of actual impacts of market performance on energy consumption requires collection of historic data. Assessing impacts of restructuring on load patterns requires hourly electric load data and comparison of these data with patterns that existed, or were predicted, before restructuring.

Electricity demand forecasts, both on a statewide and regional basis, are used by the Energy Commission to determine how much electricity will be consumed where, when and by whom. This is an essential element of our integrated energy-monitoring function that serves as an early-warning system on whether trends are consistent with State policies and the extent to which these policies are being achieved. The forecasts and assessments include demand for both electricity and natural gas demand to account for fuel switching or substitution between these energy types.

Demand forecasts developed by the Energy Commission are used for a number of other purposes including:

- Electricity system analysis;
- Building and appliance standards development and assessment;
- Energy efficiency program targeting, measurement and evaluation;
- Electricity and natural gas price projections; and
- Assessing fossil fuel supply and demand.

In addition to multiple applications within the Energy Commission, demand forecasts are used in CPUC proceedings, provide a baseline for assessing environmental rules and regulations, and are an integral input to assessing reliability in the new market structure. Current and proposed environmental policies can have substantial impacts on energy demand. Such impacts can be neglected if environmental policy agencies have an inadequate understanding of important consequences for the energy industry. The amount and time patterns of energy use have been affected by regional air quality agency attainment planning strategies that can be quantified using energy demand forecasting models, consumer characteristics and load research data, and electric system modeling.

Demand forecasts and consumer data are also essential to assessing demand responsiveness in the restructured market. Examples of demand responsiveness include:

- Demand bidding strategies (curtailable or dispatchable loads responding to economic incentives) under the ISO and PX markets;
- Rate design to communicate financial consequences of PX prices to end-users;
- Interval metering and electronic telemetry to permit customers to receive the PX price signals and to have their bill reflect the end-users actual pattern of consumption;
- Load shedding and other interruptible programs for those customers.

Other market participants such as ESPs, utilities, and financial institutions use demand forecasts to assess potential market opportunities, penetration and risks.

State and local agencies collect taxes on energy consumption and energy production facilities. Restructuring has changed the way tax revenues are collected and the entities now responsible for their payment and collection. Taxation on energy facilities was done at the State level prior to restructuring. For divested power plants in the State, property tax collection has shifted to local governments. In addition, prior to restructuring utilities were the primary entities selling energy services in the State. With the emergence of new retailers of electricity, energy sales from these new entities must be tracked and collected. The agencies collecting taxes often do not have the expertise on energy consumption to verify proper revenue collection. Cross-comparison of consumption-based revenues between the Energy Commission and taxing authorities can provide a benchmark to ensure that proper payments are being received. Another similar activity is the ability of the Board of Equalization (BOE) to verify energy sales and assure it is properly collecting the energy surcharge for Energy Resources Program Account (ERPA) funds, the Energy Commission's primary funding source. Accurate energy consumption data by retailers is essential to these efforts.

Finally, an important need for consumer data is in the Energy Commission's implementation of public purpose programs under restructuring including energy efficiency, Research Development and Demonstration (RD&D) and renewables programs. The design of these programs requires strategic information on market research. This information is essential to assure that public purpose program funds are targeted and produce tangible benefits to the State. In addition, some renewable programs are designed to encourage retail customer selection of green energy. Where public purpose funds provide subsidies, methods are needed to verify that the energy-consumption patterns of participating customers are different from those of non-participating customers in order to discern whether a true incremental impact has been stimulated. These activities related to public-goods programs require information on energy consumption, consumer characteristics and load research.

USES FOR CONSUMER DATA

The following describes the consumer data the Energy Commission needs to carry out its mandated functions along with their uses.

Consumption Data

Electricity and natural gas consumption data includes:

- Sales to end users by commercial companies and regulated utilities,
- Self generation of electricity by end users, and
- Production of natural gas that is self consumed by the producer or distributed to an end users outside of any utility s distribution network.

An important feature of this consumption data is the classification of end-use customers by economic activity for certain categories of customers. This data classification is essential to modern, economic activity-based, demand-forecasting models used by the Energy Commission. This highly disaggregated data is used to analyze specific industry-consumption patterns and to benchmark and calibrate demand-model results. Data on electricity and natural gas consumed or produced onsite has become an increasingly important element of the energy forecasting industry as end-use customers have chosen this option, for example, to reduce costs or improve the reliability of energy supplies. When combined with electricity and natural gas sales data, this gives the Energy Commission an overall picture of electricity and natural gas consumption in the State.

Consumer Characteristics Data

Consumer characteristics data include structural, demographic and geographic characteristics that allow the Energy Commission to understand and explain evolving consumption patterns of electricity, natural gas and other fuels. These characteristics help to identify factors that influence customers choices of how much energy to consume as well as what options were available when they made their choices.

Specifically for residential uses, this data includes:

- Date of dwelling construction,
- Construction style and size of dwellings,
- Appliance holdings and fuel shares;
- Installation of energy efficiency measures and practices; and
- The number of occupants and the demographics and geographic location of households.

For commercial uses, this includes complex engineering details about the type and energy usage of HVAC systems, lighting, and other energy-consuming equipment. For industrial uses, customer characteristics include information on key production processes and other features that explain energy consumption for individual industries.

Load Research Data

Load research data include hourly load shapes and or load profiles for utility systems, for different sectors, and different end uses. These hourly load shapes describe the patterns of how customers and systems use electricity. System load data are collected at points along the transmission system and account for the hourly loads in a utility's service area. Customer load data are collected through recorders installed on the revenue meters of a sample of customers. End-use load data are collected through recorders installed on individual appliances or on dedicated circuits of a sample of customers. A series of meter reads at different times and days of the week comprise a load profile for the system, customer or end use. As previously discussed, hourly load patterns have become increasingly important to understanding energy demand in the restructured market.

CONSUMER DATA ISSUES

Over the course of this proceeding, parties have raised concerns about the reporting of consumer data. The following discussion addresses some of the major concerns raised by parties. Additional specific concerns are addressed in more detail in the discussion of the Energy Commission's new approach.

Need for and Burdens of Consumer-Data Collection

Parties raised concerns about the need for data by the Energy Commission and costs and resources necessary to comply with Energy Commission data reporting. These concerns are similar to those raised by parties regarding generator data-reporting requirements. The Energy Commission understands the concerns of parties and is proposing a number of features that will significantly reduce and streamline the Energy Commission's collection of consumer data. This streamlining will significantly reduce the amount of data collected and eliminate several categories of consumer data collected by the Energy Commission under existing data-collection regulations.

As with generator data, several parties, particularly ESPs, have suggested that the Energy Commission should continue to collect all consumer data from UDCs. Some have argued that they are small companies with limited resources and expertise to conduct many of the responsibilities to collect consumer-related data, currently born by monopoly providers. They further assert that imposing current reporting requirements for consumer information under QFER, CFM and Utility Data Plans would place undue burdens on them and could result in higher prices for consumers and a less competitive electricity market. However, the notes that ESPs are currently required to file information on energy consumption (not including SIC codes) with the

Energy Information Agency (EIA), the Board of Equalization (BOE), and many municipalities that impose electricity-usage taxes. However, the Energy Commission's proposed consumption data requirements are not duplicative of these other reporting requirements. In light of this, the Energy Commission is attempting to reduce reporting burdens for all retailers by relying on existing reporting with other agencies as a compliance option.

The Energy Commission believes that requiring only UDCs to submit consumer data would raise issues of fairness. As a result, the Energy Commission will apply the adopted principle that function defines data-submission responsibilities to collecting consumer data. The application of this principle would require marketers, including ESPs, to file data on their sales to end-use customers. The Energy Commission believes it is more appropriate that the entity that retails electricity to customers provide data on those sales than to rely on UDCs to report on all electricity sales. Using the UDC as the sole agent for consumer-data collection would be inconsistent with the current market structure.

In this proceeding, the Energy Commission has also devoted considerable time and attention to determine the need for consumer data for it to carry out its mandated responsibilities. The Energy Commission listened carefully to the concerns of parties regarding the costs and burdens of consumer-data collection. As a result, the Energy Commission outlined a proposal that it believes balances the need for data against the costs and burdens associated with its collection. The Energy Commission believes that the benefits of its data-collection proposal justify the collection of the data outlined in its proposal.

Funding of Data Collection Activities

One of the fundamental issues the Energy Commission has faced in designing a consumer-data collection proposal is the funding of data-collection-activities. The changing role of utilities in the restructured market has brought into question the necessity of utilities performing certain activities to collect data and the funding of those activities by the CPUC. The responsibilities of the monopoly UDC have changed from what was under the former monopoly industry structure. As a regulated monopoly, the utility had an obligation to serve that included long-run demand forecasting as an element of resource planning in regulatory proceedings. The UDC's obligation to serve has been changed to an obligation to connect customers and serve as the default service provider. This change reduces or eliminates the need for the UDC to collect data that would permit it to make long-run demand forecasts. UDCs have asserted that the CPUC is no longer allowing the funding of such activities in traditional ratemaking. This includes data about customer characteristics to support structural modeling of demand and knowledge of general energy consumption within the service areas as an upper boundary to potential utility energy sales and peak demand.

Additionally, in decisions implementing the energy efficiency surcharge (or Public Goods Charge under AB 1890) funding of certain activities, that were included in

utility Demand Side Management (DSM) budgets, have been transferred to oversight of the California Board of Energy Efficiency (CBEE). Activities including SIC coding, demand forecast research, end-use customer surveys, load research, and other customer or market research efforts serve various other applications beyond DSM program planning, operations, and evaluation. However, the funding of these activities has raised additional concerns about the Energy Commission's continued reliance on UDCs as the sources of this data.

A Joint Recommendation was filed in the CPUC's Annual Earnings Assessment Proceeding that may provide a new process for funding these activities. On September 7, 1999 this Joint Recommendation was filed, including an agreement among major parties regarding a number of activities to be conducted under California Measurement and Advisory Council (CALMAC) that affect the Energy Commission's data collection.⁶ The purpose of the agreement is to fund the activities of the Market Assessment and Evaluation (MA&E) and regulatory oversight portions of the UDC budgets for the Energy Efficiency Public Purpose Programs. The funding source is the revenue collected since January 1, 1998 through December 31, 2002 under the PGC. The CALMAC framework establishes a collaborative process for collecting data and conducting survey efforts associated with energy demand and energy efficiency programs.

Four elements of the agreement have implications for the Energy Commission's proposed data collection:

1. A \$2.9 million baseline budget for Energy Commission research and survey efforts to include consumer characteristics and load research data;
2. A provision that UDCs supply the necessary data and customer information to the Energy Commission to conduct surveys and research;
3. A provision that allows the option for additional research and survey studies identified as necessary; and
4. A provision that allows UDCs to be reimbursed through PGC funds for costs associated with meeting Energy Commission data collection requirements.

The Joint Recommendation defines the obligations and reporting convention of the UDCs and the Energy Commission for reporting under the MA&E budgets that are established in the CALMAC collaborative. Under this collaborative process, the Energy Commission would conduct consumer data analysis to identify patterns of and changes in demand for energy through saturation surveys, unit energy consumption, and energy use intensity studies. Surveys of the residential, commercial and industrial sectors would be conducted with PGC funds. The other important element of the Joint Recommendation for data collection is the recognition that costs for processing billing, load metering, and other data used for survey samples should be covered with PGC funding. In addition, costs for processing customer-sector and class-load data, including 4-digit Standard Industrial Classification (SIC coding) for meeting consumer

demand reporting requirements for the Energy Commission, can be covered with PGC funding. The Energy Commission believes that this framework provides the funding necessary to support several important activities related to the Energy Commission's consumer-data collection. The Energy Commission will urge the CPUC to accept this important resolution to an issue that has plagued the Energy Commission's data-collection activities for the past two years.

Economic Classification of Consumer Data

One issue of particular concern to parties in the proceeding is the economic classification of customer consumption data. Currently, the Energy Commission collects data on electricity and natural gas consumption based on SIC codes. Staff and other parties have asserted during this proceeding that the majority of the costs of compliance with consumption-data reporting are not the extraction of data from accounting or customer-information systems, but rather the customer-specific effort to classify customers by their economic activity. Representatives of ESPs have asserted that they have no business interest in SIC codes for retail customers (i.e. SIC coding is not something they perform under the normal course of business and is not information that provides any value to them in conducting business). As such, they argue that to require them to conduct SIC coding for consumption data would impose an unreasonable burden on them. The Energy Commission examined a number of options to reduce the overall costs of economic-activity classification.

The Energy Commission's approach includes features that will help to reduce and more fairly distribute the costs of economic-activity classification. UDCs will continue to perform SIC coding for all customers in their service areas, including direct-access customers. This economic classification activity is viewed by the Energy Commission as part of the UDCs' distribution function. The CALMAC framework provides for reimbursements of costs for performing SIC coding through PGC funding, as discussed above.

Revenue Data

ESPs and UDCs have raised two concerns about the proposed collection of revenue data as an element of current consumption data reporting requirements: the complexity of collecting that data for reporting and the confidential nature of the data.

ESP revenues may be very difficult to separate into energy services and other services for those firms selling multiple products to a customer under joint marketing practices or offerings. For example, energy-commodity services may be sold in conjunction with equipment sales that would reduce net-energy purchases and a part of the energy services package sold to consumers. In such cases, monthly payments by customers include both the commodity energy payments as well as the repayment of capital and installation costs for equipment that has been installed. These services may be co-mingled across the company. Disentangling the energy commodity payments from other services may prove to be extremely difficult if not impossible with any accuracy. Another complexity is the fact that some ESPs bill by contract, not by customer

accounts or meters. The complexity of separating out data for reporting could mean that the reporting of revenue data would be of questionable quality and, therefore, of limited value. This fact has caused the Energy Commission to examine other alternatives to collecting revenue data from retailers.

Revenue data is considered by retailers to be highly sensitive commercial data. Registered ESPs serving residential and small commercial markets are currently required to post prices and other terms and conditions of their product offerings. However, ESPs that are serving large commercial and industrial customers are not required, by the CPUC, to divulge terms and conditions. These ESPs consider information about their prices, terms and conditions to be highly sensitive and are extremely concerned about the possibility of competitors gaining information that would put them at a competitive disadvantage. In addition, revenue data in aggregate could provide a description of the size of a firm and, in combination with other information, might be used by competitors to estimate cash flow, profitability, and other aspects of the competitiveness of certain firms. Privately held firms assert that, if access to revenue information is gained by competitors or by others in financial markets, it could negatively influence stock offerings and general perceptions of the firm in the electricity market.

As a general principle, the mere fact that data is confidential or commercially sensitive in nature should preclude its collection if no other source of data meets the Energy Commission's data needs. However, the Energy Commission has limited the amount of confidential data it proposes to collect to only that data essential to carrying out the Energy Commission's mandated functions. A number of elements in the consumer-data collection approach are intended to address confidentiality and disclosure concerns.

Confidentiality and Disclosure of Consumer Data

Parties have raised privacy concerns about the reporting of individual customer-consumption data. Parties have also raised concerns that the Public Records Act makes such a strong presumption of access to data and information that the Energy Commission will not be able to withstand a determined challenge to its confidential protection of data. In some limited cases, proprietary information on consumption, consumer characteristics, and load research is necessary for the Energy Commission to carry out its mandated functions. The fact that information is competitively sensitive does not relieve market participants from the obligation to provide information needed by State and/or Federal agencies to perform their functions.

In fact, the Legislature has adopted a statutory scheme in the Public Records Act that allows State agencies to conduct their business while protecting confidential data. These protections negate most possibilities that sensitive data will be obtained by others to the detriment of competitors or the market as a whole, which carries with it the responsibility to maintain confidentiality. The fact that these mechanisms are effective in enabling State agencies to both use and protect confidential data is confirmed by the long history the Energy Commission has in collecting confidential

data —under QFER, Petroleum Industry Information Reporting Act (PIIRA) and other regulatory programs —without release. The Energy Commission made every effort to minimize the amount of confidential data it will collect to only that which is absolutely essential meet mandated responsibilities. The Energy Commission intends to safeguard data designated as confidential to the fullest extent of the law.

Current Energy Commission confidentiality regulations identify a 3/60 rule for the provision of disclosure of data about individual consumers. Parties and staff have raised concerns about the effectiveness and workability of the current 3/60 rule. In response to these concerns, and to concerns about release of detailed data about individual ESPs, disclosure will not be based on after the fact rules like a 3/60 rule rather disclosure will be based on a pre-determined template for what cells will be treated as public.

- Utility resources necessary to designate which data cells fail the rule;
- Staff resources necessary to conduct data roll-up procedures under the rule;
- Difficulties encountered by staff in conducting roll-up procedures; and
- Stakeholder discontent with the rule.

As a result, a parallel process be initiated to revise the Energy Commission s confidentiality regulations along with the development of data-collection regulations. This will allow the Energy Commission to establish blanket confidentiality protection for appropriate data elements, alleviating the need for parties submitting certain categories of data to make case-by-case arguments for trade-secret protections. The Energy Commission will replace the 3/60 disclosure rule in current regulations. The Energy Commission outlined proposed confidentiality and disclosure measures in its more detailed discussion of the Consumer Data Collection Section. The Energy Commission will initiate an internal review of staff s confidentiality procedures to eliminate any potential flaws and identify opportunities to improve existing practices. With these additional efforts, the Energy Commission is convinced that it is doing everything within its power to assure that confidential data is adequately protected.

CONSUMER DATA COLLECTION

The Energy Commission s consumer data needs fall into three general categories. The following section discusses the data issues following categories of consumer data:

- Electricity- and natural-gas-consumption data;
- Consumer-characteristics data;
- Load-research and load-profile data.

The Energy Commission's approach calls for major streamlining of existing QFER, CFM and data plan requirements. This includes:

- The elimination and combination of a number of existing forms to reduce the overall number of forms entities will be required to file;
- The elimination of the current QFER requirements for a one-year-ahead forecast of consumption;
- The elimination of the annual requirement for utilities to file plans of survey and analytical activities under the Utility Data Plan Regulations;
- The elimination of end use load research requirements under existing Utility Data Plan Regulations;
- Modification of the customer survey requirements under existing Utility Data Plan Regulations to shift toward the collaborative process under CALMAC;
- Development of a single electronic filing in a modern relational database linking the necessary data elements and variables.

The Energy Commission will eliminate the vast majority of CFM long-term forecasting elements for UDCs, although UDCs and all other interested parties will continue to be included in the CFM process. The successful implementation of the CALMAC framework will provide the Energy Commission with the necessary inputs for its demand forecasting activities of UDC service areas. This is consistent with the changing role of the UDC to no longer have primary responsibility for long-term resource planning. However, it is unclear whether restructuring means the elimination of the long-term resource-planning role for municipal utilities. As a result of this uncertainty, the Energy Commission is requesting the municipal utilities to come forward with proposals for data-collection responsibilities for forecast-related aspects of consumer-data collection.

Consumption Data

There were four primary issues facing the Energy Commission with respect to consumption data:

1. Who should be required to file data on electricity and natural gas consumption;
2. How should coding of an economic activity be handled;
3. What are appropriate measures to assure confidentiality and protect against disclosure of confidential consumption data; and
4. What data on revenue should the Energy Commission collect?

All Retailers File Electricity and Natural Gas Consumption Data

As the previous discussion outlines, the Energy Commission determined that the equivalent function principle means that all retailers of electricity and natural gas should be required to submit information on electricity and natural-gas consumption by their customers. While some parties suggested the Energy Commission should rely on the UDCs as the primary agents to file consumer and consumption data, the Energy Commission believes it is no longer appropriate to require UDCs to file consumption data on behalf of others. The Energy Commission's new approach represents a shift in responsibility for filing consumption data away from UDCs to the retailers who supply this energy to end-use customers. The result will be that all retailers —UDCs, municipal utilities, ESPs, and other retailers on the electricity side, and LDCs, CTAs, and other gas marketers on natural gas side —will have equivalent data-submission responsibilities for consumption data.

All electricity and natural gas retailers will supply the Energy Commission with the following consumption data on a quarterly basis:

- Aggregate monthly consumption by 4-digit SIC code and county, and
- Monthly number of accounts by 4-digit SIC code and county.

Of the data-submission options presented, the Energy Commission selected the accounting-system-extract approach, in which retailers would process the data within their accounting systems and file aggregated data with the Energy Commission. This option appears to be the most workable and efficient means of acquiring consumption data.

Confidentiality and Disclosure

As previously discussed, the Energy Commission re-examined the issues of confidentiality associated with consumption data and determined that the existing 3/60 rule to provide customer privacy should be revised. It is the Energy Commission's intent to protect the disclosure of consumption- and revenue-data reporting —at the full level reported to the Energy Commission as confidential, unless the data has already been disclosed publicly. The Energy Commission will establish disclosure rules to provide parties with up-front knowledge of what will be disclosed. The disclosure rules will be a function of the following:

- the entity reporting;
- the geography being reported, and
- whether sales or deliveries are being reported.

Table 10 provides the Energy Commission's approach. This approach to disclosure should provide adequate protections against disclosing individual customer or ESP data, yet provide public access to some level of disaggregated consumption data.

The other option the Energy Commission considered for disclosure was an after-the-fact rule, such as a change from the 3/60 rule to a rule where "fewer than 10 accounts" would be made confidential. The Energy Commission believes, based on parties comments, that parties appear to be more comfortable with using a before the fact disclosure rule, as proposed above, rather than a 3/60, or fewer-than-10 rule.

Table 10
Proposed Disclosure Template for Retailer Energy Consumption Data

Geography	Individual ESP	Sum Of All ESP	Individual Small UDC¹	Individual Large UDC²	Sum Of All ESPs And UDCs	Total Energy Consumption⁶
County	None	Res Non-Res	None	Res Non-Res	EDD SIC Template ⁵	EDD SIC Template ⁵
Service Area (SA)	None	Major Sectors ³	Refined Sectors. ⁴	Refined Sectors	EDD SIC Template ⁵	EDD SIC Template ⁵
Planning Area	None	Major Sectors ³	Refined Sectors ⁴	Refined Sectors ⁴	EDD SIC Template ⁵	EDD SIC Template ⁵
Statewide	Major Sectors ³	Major Sectors ³	Refined Sectors ⁴	Refined Sectors ⁴	EDD SIC Template ⁵	EDD SIC Template ⁵

- 1 Small UDC is one with less than 25,000 customers.
- 2 Large UDC is one with 25,000 or more customers.
- 3 Major sectors are residential, commercial, industrial, and other.
- 4 Refined sectors are those in existing regulations, Title 20, Section 1244(d)(3) (A) through (J) inclusive, except that group (G) will be split between agricultural and water pumping, and group (I) will be eliminated.
- 5 Employment Development Department releases employment data at various SIC aggregates necessary to preserve confidentiality of reporting firms statewide and for each individual County.
- 6 Total energy consumption includes sales from all retailers as well as self-generation and non-grid connected loads

SIC Coding

The most efficient approach to SIC coding is to require UDCs to continue to classify all end-user accounts by SIC code, including those customers that participate in direct access. UDCs would then transfer the SIC coding to the retailer for its use in reporting to the Energy Commission by SIC-account aggregates. The CALMAC framework, previously discussed, provides PGC funding for QFER compliance, including SIC coding. Thus, UDCs have a funding source along with the necessary resources and expertise to conduct SIC coding themselves. The Energy Commission will convene a working group of ESPs, CTAs, and UDCs to develop the mechanics of this data exchange.⁷

The Energy Commission will draft regulations that will start with 4-digit SIC coding and shift over to the North American Industrial Classification System (NAICS) 6-digit coding system as it is put in place. To accommodate the proposed shift from SIC to NAICS coding the proposed data collection regulations should specifically refer to economic activity classification authorized by the federal Office of Management and Budget .

All retailers will be required to provide a full set of 4-digit SIC code data to the Energy Commission that will be classified as confidential. Various aggregations of this data will be disclosable after processing by the Energy Commission.

One alternative that the Energy Commission examined for SIC coding was the use of data dumps from UDCs and ESPs, where the Energy Commission would take on the responsibility for SIC coding of raw data. In addition to the need to substantially increase Energy Commission resources to handle such a daunting task, this approach did not appear to be acceptable to parties due to concerns over confidentiality and customer privacy. The Energy Commission also considered having ESPs do the SIC coding themselves. In response to this option, ESPs testified they had neither the resources nor the technical expertise to conduct the SIC coding.

An additional alternative, suggested by staff, was the use of EDD codes for economic-activity classification. Since that suggestion was made, an Energy Commission staff-EDD pilot project has shown limited success and has not yet adequately demonstrated that the customer matching required by this approach can be done with sufficient accuracy to be a useful alternative. The Energy Commission is convinced that CALMAC funding for the SIC-classification effort, on behalf of all retailers, appears to be the best solution that can be devised.

Revenue Data

As previously discussed, the Energy Commission determined that the complexity associated with utilities, and other retailers, providing monthly accounting-based revenue data, would likely result in data submission on revenues that do not have a high level of accuracy. Discussions with private retailers of commodity energy have revealed substantial problems with the accurate reporting of just commodity energy for end-use customers. Among these problems are separating energy from other elements of contracts and tracing revenue back to specific accounts for geographic and SIC-code matching.

The Energy Commission believes that estimation techniques should be used as a substitute for accounting-based revenue data for the purpose of understanding commodity prices. In lieu of accounting-based revenue data, retailers will be asked to develop a separate report of average commodity price by sector.

By estimation, the Energy Commission means a good-faith estimate of the average price of the commodity energy alone, sold to end-use customers, in each of the four major customer sectors shown in **Table 11**. The Energy Commission is not requiring

an accounting-based, volume-weighted computation of commodity prices using data for each customer. Instead, the Energy Commission is asking for a ballpark estimate of the average price reflecting the diversity of specific contract arrangements for that customer sector. These data will be classified as confidential, unless a specific element has already been publicly released.

Table 11
Monthly Commodity Energy Price

Energy Commodity	Unit	Sector			
		Residential	Commercial	Industrial	Agricultural
Electricity	\$/mwh				
Gas	\$/mmbtu				

Additional Mechanisms to Ensure a Level Playing Field

In attempting to fully implement the retailer-based reporting requirements, the Energy Commission will require UDCs and LDCs to provide SIC classification of each end-user to the retailer. The Energy Commission believes that the activity of classification is more expensive than modifying usage accounting systems to carry this data item for each customer, or of populating such a database field with data, when a transfer of a bundled service customer from the UDC to the ESP is made. However, the Energy Commission heard ESPs express concern that this movement, in the direction of a level playing field, is not sufficient. ESPs are concerned that they will have to recover their costs of compliance in the energy charge they make to customers, while the UDC will be able to cover its costs in distribution charges.

This concern is not unique to the Energy Commission's reporting requirements. In fact, inequities resulting from the treatment of the costs of Energy Commission reporting requirements are probably small compared to other concerns of the ESPs. ESPs have made their general concerns known to the CPUC on several occasions regarding many activities pursued in parallel by ESPs and UDCs. The 1998 Revenue Adjustment Proceeding D.99-06-058 appears to accept this complaint and directs UDCs to move in the direction of including a wide range of energy procurement support costs into the energy charge for bundled service customers, rather than the distribution charge for all customers.

In order to further level the playing field, the Energy Commission believes it is appropriate that retailer-based reporting requirements of the UDCs and LDCs, such as those proposed in this report, also be included within the category of energy procurement costs rather than in the category of distribution costs. While the Energy Commission can report its concerns to the CPUC, it is incumbent upon ESPs to pursue the addition of UDC costs of compliance with retailer reporting requirements to the set of issues that the 1999 Revenue Adjustment Proceeding will resolve.

Special Consideration for Natural Gas Marketers

The retailer reporting requirements in the Energy Commission's new approach are different from requirements that have been in place for the past decade for natural gas

marketers. The Energy Commission's existing regulations use a different philosophical approach to consumption-data reporting. Those regulations require the utility—the local distribution company—to report deliveries of natural gas through their distribution system. Such deliveries are a combination of the sales by the utility and the sales to utility distribution customers of all natural gas marketers. Only those natural gas marketers selling to end-use consumers outside of the LDC distribution pipelines have reported directly to the Energy Commission in the past.

The Energy Commission is ending the practice of requiring LDCs to report deliveries because it is incompatible with the principle of retailer reporting. This change will require each natural gas marketer to directly report natural gas consumption data to the Energy Commission. Each quarter, the retailer would report for each of the previous three months by 4-digit SIC group, by county, reporting monthly sales and number of accounts in each group.

Small natural gas marketers, operating under the core aggregation programs established by the CPUC, have raised particular concerns about meeting this proposed reporting requirement. These small gas marketers operate under very small margins, and might have to incur accounting system modification costs that are disproportionately expensive to the volume of customers and sales they actually serve. The Energy Commission will retain its retailer reporting requirements approach. However, the Energy Commission also concluded that a compliance option to result in a lower-cost option can be devised.

The Energy Commission will provide a compliance options available to any entities operating strictly within the CPUC core aggregation program, that would permit the LDC to file these data as an agent of the natural gas retailer. The final regulations will place a direct- reporting- requirement obligation upon all natural gas retailers, but create a compliance option targeted to these small retailers that will permit this agent relationship to the extent that core aggregator/LDC relationships support it. Utilities will no longer be able to report total deliveries, but will have to report their own sales to end-use customers. To the extent they are operating as an agent of a retailer, they will report that specific retailer's data separately in the same manner as the retailer would have had to report it directly to the Energy Commission. To the extent that LDCs have agreed to provide, or the CPUC directs them to provide, these services to core aggregators, the Energy Commission is willing to accept data filed in this manner. There will have to be several implementation details, such as retailer attestation to the accuracy of the reports filed by the LDC with the Energy Commission that must be resolved in the rulemaking stage.

Consumer Characteristics Data

The Energy Commission needs data on consumer characteristics in order to meet its mandated functions. The primary issues facing the Energy Commission with respect to consumer characteristics were:

- The uncertainty about continued funding of survey efforts under the restructured market and confidentiality;

- Confidentiality, customer privacy and disclosure concerns; and
- Funding of Collaborative Survey Efforts.

In the past, structural characteristics were obtained primarily through the Utility Data Plans (Title 20, CCR Section 1344), under CFM. These regulations required utilities to conduct end-use customer surveys in the residential and commercial sectors every two years and in the assembly-industry sector every four years. Funding for these activities for investor-owned utilities was done through CPUC approval of utility DSM budgets. As previously discussed, the recent CALMAC framework provides a new collaborative process for conducting surveys on customer characteristics. While the Energy Commission will conduct most of these surveys, within its baseline CALMAC budget allotment, it still needs the cooperation of UDCs for supporting data and assumptions. In addition, under the CALMAC framework, the collaborative process could permit the participating parties to fund further projects beyond the baseline budget allotted to the Energy Commission.

The Energy Commission is eliminating the Utility Data Plan Survey requirements and is shifting, instead, to fixed requirements and a compliance option that supports the CALMAC framework for conducting customer-characteristics surveys. This includes the elimination of Data Plan requirements for data on the market penetration of energy-efficiency measures. The Energy Commission will retain fixed-survey requirements for medium and large utilities, including UDCs and municipal utilities. These utilities will be required to conduct surveys and associated analytic studies using the survey results; once completed they will provide data and results to the Energy Commission. Data to support fixed survey requirements reported to the Energy Commission should include the results of surveys, billing histories, and other data identified in proposed regulations. The fixed survey requirements include:

- Residential building survey, with associated UEC analysis, every four years;
- Commercial building surveys, with associated EUI analysis, every four years; and
- Industrial sector surveys every four years.

In the past, the Energy Commission provided a compliance option for fixed surveys that allowed for equivalent surveys, and analytic projects agreed to between the utility and staff, that would resolve forecasting issues. Under Utility Data Plan Regulations, utilities were required to file an annual plan outlining these surveys or analytic projects. The Energy Commission will revise the existing compliance option for the fixed survey requirements to include the collaborative consumer research process proposed under the CALMAC framework. The Energy Commission will eliminate the requirement to file annual plans. Through this approach, the Energy Commission hopes to encourage the participation of all utilities, including UDCs and municipal utilities, in this collaborative process. In effect, utilities not now part of this process

can opt in by making a financial contribution and participating in the group's research projects.

The Energy Commission views the CALMAC framework as providing the most efficient way to use the collective resources of the parties involved in collecting consumer-characteristics data. The Energy Commission needs consumer-characteristic data to support demand analysis. Using this primary rationale for collecting consumer-characteristics data, the Energy Commission agrees it should be responsible for collecting these data. Neither the distribution function of these utilities, nor the retailing functions of utilities and ESPs in the restructured market, justify collection of these data. Municipal utilities with long-term obligation to serve responsibilities can opt in to group customer server activities if they perceive this to be in their best interest. Incremental costs for conducting surveys, and research costs for UDCs, would be funded through PCG, while municipal utilities would continue to fund surveys through existing rates.

The Energy Commission will draft regulations to support the CALMAC framework by permitting utilities to take the compliance option of having their residential-building, commercial-building and industrial-sector survey requirements met through statewide surveys conducted under the CALMAC framework. These regulations will state that utilities must submit to the Energy Commission, or an Energy Commission-designated contractor, information and data for conducting surveys and performing subsequent analyses that the Energy Commission staff believes is necessary, and in a timely manner. This approach will include appropriate billing-file records to enable sampling, individual billing file histories for sampled accounts, and load metering data that the Energy Commission staff believes to be required for a given project. All individual customer data should receive the confidentiality protections appropriate to ensure that individual privacy is maintained .

Confidentiality and Disclosure

In the past, the Energy Commission has considered survey data confidential; individual results have not been disclosed. However, processed data has been disclosed in the form of cross tabulations and ratio calculations as long as the individual identity is not compromised. Parties to the proceeding have raised concerns about the disclosure of survey data. In the context of survey data, the 3/60 disclosure rule in current Energy Commission confidentiality regulations is likely to be unworkable. The 3/60 rule only works in the context of the entire population because that is what the 60 percent constraint tests. For survey data, since we never know the characteristics of the entire population from a survey, that test cannot be done.

Staff has examined ways to blend together several respondents under a disclosure rule such as fewer than 10 respondents to ensure that any single one of them cannot be discerned. This can be difficult if the survey mixes very different respondents together. For example, a survey with three commercial buildings might include a very large high-rise building that would dominate the results in some ways that might be discernable if the buildings were weighted-in with other data. If blends of ten or more

are used, then individual buildings would be harder to discern. However, because there may not be ten respondents in each and every data cell reported the Energy Commission might be precluded under such a rule from reporting data that was used as inputs to the demand-forecasting model.

Staff also examined practices used by Energy Information Administration (EIA) to prevent disclosure of individual data. EIA uses different measures, depending on the major customer sector, to prevent disclosure that might harm an individual respondent. In the case of EIA, the survey efforts are independent of a utility so, therefore, utility interest in disclosure is not part of their measures. EIA's practices are summarized below:

- Residential:- a public-use file with individual respondent data is released with name and address (and most other geographical identifiers) removed. Some other "masking" of usage and other data is used to ensure that even utilities cannot match respondents to their customers using their own consumption histories. This is achieved by adding error terms to weather, prices, and other variables, and using other masking techniques.
- Commercial:- a public use file with individual respondent data is released. As with the RECS, variables are removed and masking is performed to prevent the disclosure of individual respondents and their data.
- Industrial:- no results except written tabulations and analytic reports. EIA does not even get the data itself, it remains in a Bureau of Census 'data warehouse' that only authorized people with pre-approved research studies can interrogate. Monitors ensure that nothing leaves electronically and that paper printouts do not violate disclosure restrictions.

The Energy Commission will ensure that no individual data from survey efforts or filings will be released in a way that permits privacy to be violated. The Energy Commission believes all parties support this decision. The Energy Commission will accept the disclosure mechanisms pioneered by the federal EIA as the appropriate approach for survey data results. For the residential and commercial sectors EIA discloses individual customer survey results after stripping name and address and masking any other variables that might permit identification of the respondent. EIA discloses no individual respondent data for the industrial sector. During review of this issue in the 1997-1998 revision of confidentiality regulations, the CPUC permitted individual energy consumption histories to be released with name and address stripped for the great majority of end-use consumers.

The Energy Commission believes that the masking techniques used by EIA permit the maximum release of data to facilitate analysis by market participants and researchers, but preserve privacy of individual respondents. The Energy Commission's existing confidentiality regulations already protect these data at the full level of response. However, the Energy Commission will ensure that individual respondents cannot be identified in the revised disclosure regulations for confidential data.

- CPUC (or its successor entities responsible for EEPGC-funded programs) should get access to the complete datasets of survey results, provided they sign non-disclosure agreements that preserve confidentiality. These entities do not get access to the overall billing system data or other end-use population databases used to select the samples, or the samples themselves.
- DSM program administrators should get access to the portion of the survey data relevant to their DSM programs, providing they sign appropriate confidentiality agreements. These entities do not get access to the overall billing system data or other end-use population databases used to select the samples, or the samples themselves.
- Utilities opting into a project within the CALMAC process should get complete access to the portion of the results which are the customers in their service area, again providing confidentiality agreements are signed.
- Public access should be provided at a level comparable to that provided by EIA for its national surveys, assuming that techniques for masking individual survey responses can be adapted to the smaller geographies of California to ensure that records of individual end-user respondents cannot be identified.

Load Research Data

Load research data is essential for the Energy Commission to carry out its mandated functions. The Energy Commission will continue the collection of load research data from medium and large utilities (UDCs and municipal utilities). This reporting requirement should be the primary responsibilities of utilities as it is tied to the distribution function they perform. This data should include system load shapes and customer load shapes. Hourly load data for both system and sector load shapes should be provided for hourly (60 minute integration) metered demand. These requirements are consistent with obligations of UDCs under CPUC guidance and the practical activities expected of utilities by the ISO.

This reporting requirement for load research data is also consistent with current reporting requirements at the Federal Energy Regulatory Commission (FERC) (Form 714) for medium and large utilities. The Energy Commission will accept utility submission of FERC data as a compliance option. The Energy Commission will eliminate the existing requirement for end-use load shapes, and its staff will take on the responsibility for conducting any research or surveys on end-use load shapes.

For system load shapes, this means an expansion of current requirement to include medium utilities that are reporting to FERC, but that have not been required to report to the Energy Commission. Because the cost of compliance is only the incremental cost of sending copies of the FERC data submission to the Energy Commission, this expansion to medium utilities is reasonable. As we have with some kinds of generation data, the Energy Commission will institute a direct reporting requirement with the presumption most utilities will use the FERC compliance option to ensure

that it will obtain this data irrespective of how/whether FERC changes its own requirements.

For sector load shapes the Energy Commission will move from a typical-day basis to a full annual hourly basis. Most utilities are already collecting and posting this hourly data. As a result of this, the change in reporting basis is more consistent with current industry practices. The move to a full annual basis is also more consistent with current market structure, which is based on hourly markets. This approach reduces the work necessary to come up with the typical day required under the old regulations since the post-processing step to determine typical days for each month will no longer be needed.

For sector load shapes, UDCs will need to have the cooperation of ESPs and retailers to assure their load shapes are accounted for and that UDC load research data remains representative of all consumers connected to the distribution system. Cooperation in accessing end-use customers of retailers and confidentiality protections will need to be assured. Utilities will be required to process data aggregating the load sample points into the economically defined customer sectors used by the Energy Commission. Costs associated with sector load shapes are expected to be modest over and above what utilities are already doing. The Energy Commission notes that these incremental costs for UDCs can be reimbursed under the proposed CALMAC framework.

The Energy Commission examined several other options for acquiring load research data. Parties suggested accepting the UDC static and dynamic load profile data currently required by the CPUC. There are two shortcomings of this approach: the fact that the posted profiles do not match the sector definition used by the Energy Commission; and municipal utilities are not subject to CPUC requirements. The Energy Commission also considered the option of having UDCs transfer their load research data at the individual end user level to the Energy Commission. Energy Commission staff would then process the data into aggregated sector estimates. Utilities need to continue to perform virtually identical work for rate design and other purposes. Therefore, it would be more efficient for UDCs to be reimbursed for the incremental cost under the CALMAC framework, than to have the Energy Commission assume these responsibilities and costs. Also confidentiality and customer privacy concerns are much reduced by having utilities do the data processing into customer sectors, rather than Energy Commission staff.

Parties also suggested the option of having the Energy Commission conduct any necessary load research itself. Under such a proposal, UDCs would provide overall customer population data to the Energy Commission for use in selecting a sample. The Energy Commission will identify end-use customers to meter, install metering systems, collect and process interval data. There was also uncertainty about the Energy Commission's ability to secure the necessary resources and staff to conduct load research. In addition, UDCs raised concerns about confidentiality for supplying the necessary customer population data. The Energy Commission believes it is appropriate for utilities and UDCs to continue to collect and submit system hourly and

customer sector load research data, with incremental costs compensated under the CALMAC framework. The Energy Commission believes this approach is a more efficient and cost-effective means of acquiring these types of load research data. End-use and short-term whole-building load-research projects, that continue to provide data important to demand forecasting and DSM measurement and assessment, can be acquired by Energy Commission staff or its contractors.

PARTIES' COMMENTS ON THE COMMITTEES' PROPOSAL

The Committee received comments on its draft consumer data proposal from seven parties including: Southern California Edison (Edison); Pacific Gas & Electric (PG&E); San Diego Gas & Electric and The Southern California Gas Company (SEMPRA); California Manufacturers Association (CMA); joint filings by Enron Corporation, Green Mountain, New Energy Inc. and Utility.Com (Joint Parties); a joint filing by small natural gas marketers and core aggregators (small natural gas marketers), and Energy Commission staff (Staff). There were several themes raised in these comments including:

- Questions about the need for the Energy Commission to acquire certain data and the proposed uses for data that parties believe is unnecessary or duplicative of other state or federal agency functions;
- Concerns over the costs and/or burdens associated with the Committee's proposed data collection and application of the equivalent function principle;
- Concerns over the funding source for collaborative efforts to acquire consumer characteristics and load research data;
- Support for the Energy Commission's proposal to revise the Energy Commission's confidentiality regulations and to protect against the disclosure of consumption and other consumer data.
- Distinctions between the restructured electricity market and natural gas market that raise issues about natural gas consumption data.
- Concerns about load research.

The following is a summary of these comments. Specific comments on details of the proposals are addressed in the following section on Response to Parties comments.

Southern California Edison (Edison)

Edison supports retailer-based energy consumption reporting requirements as proposed by the Committee and believes a UDC should not be reporting ESP-specific data to the Energy Commission. Edison noted in its comments that the proposal recognizes the current changes in the electricity market and the changing nature of reporting requirements the electricity market poses. They stated their belief that the Energy

Commission's effort to streamline and ensure equitable reporting burdens represents progress in the developing restructured market. Edison notes the Energy Commission's reliance on the current availability of PGC funding to undertake certain data collection activities. Edison states their belief that the current availability of these funds should not obligate any organization to undertake these activities without a permanent or long-term source of funding nor should they represent permanent responsibilities to any organization. Edison contends that if the Energy Commission wishes to pursue public data collection, these activities must be met with public commitments of funds. Edison further noted a number of clarifications that should be made with respect to Energy Commission reports' description of PGC funding and the CALMAC framework.

Edison supports the Energy Commission's willingness to re-open confidentiality and disclosure issues, appreciating the Energy Commission's proposed substantial work on confidentiality issues in a parallel process to revise current confidentiality regulations. Edison supports the Energy Commission's recognition of the distinction between designation of data as confidential and disclosure rules for aggregates of such data and recommends that the principle of equivalent function be carried forward to data disclosure. In particular they note that the proposed reporting of UDC and direct access sales may result in conflicting disclosure requirements for the two entities.

Edison raised concerns about the costs that might be imposed by a requirement that UDCs provide hourly data by customer sector rather than rate group as used by the UDC in CPUC rate design proceedings. SCE also questioned the need to provide hourly system load data.

Pacific Gas & Electric (PG&E)

PG&E supports the Committee's redefined role of information collection from distribution utilities and appreciates the Committee's and staff's efforts to assure that the burden of gathering data from distribution utilities is limited and done in a way that protects customers' privacy. However, PG&E notes that much work remains to be done to update and define more specifically the underlying missions that require data collection, what specific data should be collected, and what confidentiality protections are required.

In particular, PG&E questions the Energy Commission's role in market monitoring given the roles of the ISO and PX Market Monitoring Committee's and the CPUC's and EOB's interests in this area. PG&E notes that the division of responsibilities among the various agencies accountable for energy in California is unresolved and in flux. PG&E restates its position, articulated last year (February 20, 1998) that these responsibilities should be clarified before extensive data collection rules are changed.

PG&E does not believe the collection of consumer characteristics data through survey should be part of the revised regulations due to the inherent separation between proposed UDC obligation under these regulations and the lack of UDC control over authorization of long term funding required, for either utility or Energy Commission-

conducted surveys. PG&E notes that the report proposes to draft regulations that would support the CALMAC framework by permitting utilities to take the compliance option having their survey requirements met through statewide surveys.

However, PG&E is concerned that if any of the surveys are not endorsed by CALMAC and funded through CPUC authorization of the CALMAC framework, that UDCs will be burdened with a compliance obligation, which it cannot and should not be expected to meet. PG&E states its confidence that the Committee is aware there is no funding option reasonably available to the UDCs outside of the CALMAC framework. PG&E further notes its concerns that the proposed fixed survey requirements may be unrealistic and could interfere with negotiations about the exact nature of CALMAC. As a result, PG&E recommends that the scope and schedule of consumer-characteristics data collection be negotiated through the proposed CALMAC framework.

PG&E raised concerns about the potential cost of load research if the customer sectors required by the Energy Commission were not carefully spelled out and defined in a public process. PG&E also suggests that load research data reported by a utility be restricted to certain purposes.

San Diego Gas and Electric and Southern California Gas Company (SEMPRA)

Sempra supports the Committee's proposal to revise the 3/60 confidentiality rule, to review the confidentiality regulations for consumption and revenue data and to eliminate the annual plan. They note the Committee's recognition of the changing role of the UDCs. Sempra raised concerns about the funding of data collection activities noting that the CALMAC framework has not yet received approval at the CPUC and only covers the period through 2001. In addition they note that many of the details have not yet been worked out.

Sempra notes they are very pleased with the Committee's recognition of the need for a level playing field by requiring all players to report their customers' usage. They are concerned that they would have to submit SIC code level data without aggregating to ensure confidentiality. Sempra supports the Committee's proposal that UDCs do SIC coding for all accounts including ESP customers. However, they do caution that there needs to be consistency and uniformity in the application of SIC coding definitions. Sempra also supports the Committee's proposal to collect average commodity prices rather than accounting-based revenue data.

In additional comments, SEMPRA reiterated its concerns about the lack of assurance regarding a permanent funding source for data collection, surveys and analysis. SEMPRA's position is that unless there is an agreement on a permanent funding source to pay for these activities, even though they agree in principle with much of what the Committee is proposing, they cannot support the Committee's proposal. SEMPRA further notes concerns related to the collaborative nature of designing surveys and having access to survey results. SEMPRA notes that staff's comments

seem to imply that once the CALMAC funding agreement expires, then the utilities will no longer have access to information generated from these data analysis activities. They ask the Committee to address this issue.

California Manufacturers Association (CMA)

CMA reiterates concerns raised in past comments during this proceeding on data collection and confidentiality: whether the Committee's proposal duplicated what was available from other governmental agencies and the marketplace; whether the Committee's proposal exceeds the Energy Commission's statutory authority; and whether the Committee's proposal provided competitors access to confidential, proprietary information, with intrinsic market value. CMA believes that only the third of these concerns, confidentiality, has been addressed in the draft proposal.

CMA contends that the draft proposal fails to identify the specific need for the detailed level of information being sought. They note that the proposal assumes some functions, like trend assessment, that will be provided by other governmental agencies and by the market. CMA states they support the statutory obligation of the Energy Commission to perform policy development, but raises concerns over some of the market oversight functions that they think would be duplicative of other entities. CMA believes the Energy Commission must first identify where other agencies including the ISO, PX, CPUC and EOB are performing similar functions and collaborate to avoid duplication, or worse, conflict.

CMA believes the Committee is proposing to mandate new reporting requirements on private firms rather than attempting to obtain information from other entities that already collect and develop such data. CMA notes that their members report that they already submit the same type of information sought by the Energy Commission to EIA. They also question the Committee's proposed need for dis-aggregated data in light of industry restructuring. CMA contends that end-use forecasting may have played an important role in determining the need for new power plants funded by ratepayers, but that role ended with the Governor's signature of SB 110 (Chapter 581, Statutes of 1999).

Finally, CMA notes a number of improvements over past proposals including the Committee's intent to revise confidentiality rules and to protect pricing information by requiring ESPs to report average commodity prices rather than accounting-based revenue data. CMA points to the joint CALMAC effort as an appropriate model for conducting data collection. However, they raised concerns about the use of PGC funding for what they contend is discretionary funding for government agency functions not envisioned under AB 1890.

The Joint Parties (Enron, GreenMountain.com, NewEnergy Inc. and Utility.com)

The Joint Parties filed comments stating their belief that the Energy Commission does not have the statutory authority to require ESPs to report consumption or pricing information about their customers. Despite this disagreement, they note several

improvements over previous iterations of consumer data reporting requirements including: a better approach to maintaining confidentiality; support for collaborative efforts; and elimination of the requirement that retailers provide revenue data. They go on to note two fundamental disagreements with the draft proposal. First the Joint Parties question the underlying rationale for data collection activities. Second, they contend that requiring ESPs to file consumption data would require duplicative investments in collection and reporting systems.

The Joint Parties note the Committee goes to some length to describe the role of the Energy Commission and the data it needs to support this role. However, they contend that the Committee has not considered minimizing duplicative oversight and data collection. In particular, they argue the Committee has ignored the existence of new entities such as the market surveillance committee of the ISO, asserting that they are performing many of the tasks the Energy Commission claims are necessary to support the electricity market. They note that these are duplicative of other activities underway.

The Joint Parties note their single most important objection to the Committee's proposal is that it is not the most cost-effective method to obtain market data. It is their contention that all the data that the Committee has identified (with the exception of revenue data) can be obtained from the UDCs and that requiring ESPs to file data on their sales is duplicative of systems UDCs already have in place. They contend that this approach will result in higher costs to Californians and pose a hindrance to the development of competition. ESPs asserted that requiring ESPs to meet data reporting requirements would impose large initial expenses to reprogram customer databases, research, and input counties and SIC codes they currently do not have. In addition, ESPs contend they would have to incur on-going expenses for reporting data and maintaining databases. They note that UDCs already have systems in place to report data on all retail customers and have been providing this data to the Energy Commission. ESPs contend that having UDCs continue to report on all retail customers is the least-cost solution in terms of the costs to all parties, to acquiring consumption data. They conclude that it would be more efficient and more competitively neutral, to have UDCs continue to report this data.

The Joint Parties object to the Committee's application of the equivalent function principle on the grounds that it is not at all clear the ESPs and UDCs are performing the same function in the case of consumption data. They argue that the data reporting function is more similar to the mandated distribution services or public goods charge obligations that UDCs have than to the competitive energy service function ESPs provide. The Joint parties maintain that the Committee's argument that SIC coding is a distribution related function could be equally applied to the entire data reporting process. They further note that what they call the parity principle ignores a major inequity; that UDCs have cost recovery mechanism for this activity while ESPs do not. The Joint Parties argue that ESPs should not be asked to provide data without establishing a cost recovery mechanism.

Small Natural Gas Marketers

The natural gas aggregators and marketers raised concerns about the Committee's proposal to place direct reporting requirements for natural gas consumption on retailers. Their major objection is that the proposal appears to be built entirely around circumstances in California's electricity market, without consideration of any differences between the electric and gas industries. They note that the Committee's discussion of objective concerns regard recent developments in electricity markets. These include AB 1890, SB 477, distributed and on-site generation and metering issues. They note that no treatment was proposed specifically for the developments, or lack of development, in the natural gas market.

The gas aggregators and marketers note that restructuring of the natural gas market has been in place for eight years for core markets, and nearly fifteen years for non-core with only minor regulatory changes. They noted in verbal comments that core aggregators represent less than 5 percent of total core procurement market. They contend that there is no rationale for imposing entirely new reporting requirements on non-regulated participants in the gas market.

Gas aggregators and marketers contend that the Committee's proposal contains unnecessary and redundant procedures for obtaining gas market consumption information. They note that utilities are the sole collectors of gas consumption data in the State and have a source of reimbursement for their reporting costs. The aggregators and marketers point out that the utilities willingly provide this data on their behalf. PG&E representatives have indicated a willingness to continue this relationship and so far as the aggregators and marketers are aware, the other utilities are willing to do so as well. In addition, in verbal comments they noted that marketers must operate under very small margins and that meeting this new requirement they would incur very high costs for modifying their accounting systems that are disproportionate to the volume of customers they serve.

Energy Commission Staff (Staff)

Staff supports the Committee's proposal for consumer data collection. They believe that it balances the interests of the entities that would provide data with the Energy Commission's need for such data to support its mandated functions.

Staff notes that many of its own previous proposals involved more detailed data deliveries from UDCs and ESPs, to which the industry objected. The Energy Commission has adopted the current accounting system extract approach from a utility reporting requirement to a retailer-reporting requirement.

Staff contends the Energy Commission's approach is consistent with the principles adopted June 1998 in the following ways. The Commission's principle of equivalent data obligations for entities performing equivalent services results in all retailers being required to provide data on their customers' energy usage. In other words, electricity commodity ESPs would provide data about their customers' usage in parallel with UDCs performing an analogous function for the bundled service customers.

The Committee's application of this same principle results in a continuation of load research requirements on UDCs alone because they continue to have ratemaking responsibilities for all loads on their distribution systems that ESPs do not share. Staff also supports the Energy Commission's approach of the principle of reducing burdens on industry participants to the lowest level feasible. This is done by the Energy Commission's shifting responsibilities for customer characteristics data away from UDCs, who no longer retain an obligation to serve.

RESPONSE TO PARTIES' COMMENTS

The Energy Commission responds to the major themes raised in parties' comments in the following discussion. The Energy Commission notes that several parties continue to raise concerns about the Energy Commission's jurisdiction to collect data from new electricity market participants, particularly ESPs. Parties' challenges to the Energy Commission's authority were addressed in the early part of the proceeding by bringing this issue before the full Commission. The Energy Commission determined that restructuring of the electricity market has not changed its data collection authority.⁸ Since full Energy Commission adoption of these findings on jurisdiction and authority, it has become clear that ESPs are subject to the jurisdiction of the Board of Equalization and the federal EIA for reporting data similar to the Energy Commission's requirement. The Energy Commission believes that since ESPs are in fact providing data to these other agencies, there is little justification for continued assertions that it should not be able to obtain similar data about energy consumption to conduct its mandated functions. In fact, a number of ESPs already provide consumption data to the Energy Commission under the SB 1305 program.

Need for and Uses of Data

The Energy Commission has clearly stated the need for data to support its role and functions of trends assessment, policy development and market monitoring. The Energy Commission identified several important assessment activities for which they are responsible. These include the need to inform the Governor, Legislature, and the public about the mid- and long-range outlook for the electricity industry and the impact of future demand and supply trends on the economy, the environment, and public health and safety. Despite the desires of some parties to the contrary, the Energy Commission continues to prepare multi-year load forecasts for internal and external uses. UDCs and the ISO have used these load forecasts in their own roles. In addition, the Energy Commission serves as an early warning system for identifying emerging problems and opportunities. Numerous other analytical activities are outlined in this report.

Some parties suggested in comments and in verbal testimony that the Energy Commission's role in market monitoring is duplicative of market surveillance efforts already underway at the ISO, PX and Electricity Oversight Board and are therefore unnecessary. Parties to the proceeding may have misunderstood the Energy Commission's role in market monitoring. Market surveillance to identify gaming and

bidding strategies or other behavior that would be considered abuses of market power in the day-to-day operations of the market are clearly within the purview of the previously mentioned entities. The Energy Commission has no interest in duplicating such efforts and is not proposing to do so. Rather, the market monitoring activities envisioned by the Energy Commission have more to do with mid to long-range issues not being addressed by other entities in the market or by another public policy body.

At least one party suggested that the elimination of the integrated assessment of need through recently signed legislation, SB 110, eliminated the Energy Commission's forecasting and assessment function. SB 110 did eliminate the Energy Commission's mandate to determine, during its siting cases, whether a power plant application was consistent with statewide assessment of need. The Energy Commission has agreed with parties that such a need determination is no longer appropriate for power plants in the restructured market that are now funded with private investments rather than ratepayer funds. However, SB 110 did not eliminate the Energy Commission's responsibility to carry out forecasting and assessment of the electricity market. In fact, during the various phases of the SB 110 debate, many parties and key legislators spoke favorably about the Energy Commission's forecasting and data collection abilities for market monitoring purposes.

Some parties may object to the Energy Commission's intent to continue demand forecasting and electricity system analysis activities or to the roles the full Commission have already endorsed. It was concluded that parties' contentions that the report fails to substantiate the need for data has little, if any, merit. This report outlines a number of important activities and roles that are supported by the Energy Commission's forecasting and assessment activities. These include:

- Assessing future trends in energy consumption (such as how much electricity will be consumed where, when and by whom);
- Forecasting energy demand for use in electricity system analysis; building and appliance efficiency standards; energy efficiency program targeting, measurement and evaluation; and electricity and natural gas price projections;
- Evaluating the impact of market performance on energy consumption and patterns of energy use;
- Assessing demand responsiveness in the restructured market (such as demand bidding strategies, rate design, providing price signals through meters, and load shedding measures); and
- Implementing public purpose programs including energy efficiency, RD&D, and renewables programs.

The Energy Commission is convinced that the public benefits produced from these activities justify the data collection that is proposed.

Costs and Burdens of Data Collection

Several parties, particularly ESPs, contend that the Energy Commission is imposing unnecessary costs and burdens by requiring them to provide energy consumption data. They assert that utilities already have all this data and should therefore be required to file such data on the ESPs behalf as the lowest cost approach for acquiring data. However, the Energy Commission believes that this approach is inconsistent with the changed role of the UDCs and the emergence of new market entities that now perform the retailing function in the market. The Energy Commission disagrees with some parties' contention that data collection of consumption data is more a distribution-related function than it is related to the retailing function. Parties who sell directly to end-use customers have information on those sales primarily because they perform the retailing function in the market. CPUC forums discussing further changes in UDC rate design and direct access billing options clearly imagine the possibility of the UDC not having individual end-use usage data for all customers. The Energy Commission can protect its own interests by creating consumption data reporting requirements that are indifferent to such developments.

The Energy Commission notes that ESPs already have obligations to report energy consumption data to other government agencies, including EIA, BOE and municipalities. While the data these agencies already collect does not exactly match the data required by the Energy Commission, the ESPs have in place existing databases that are set up for consumption data. The Energy Commission notes that its reporting requirements add to, but did not initiate, this series of energy-consumption-based reporting requirements. The Energy Commission has also advocated in this report that where one entity is reimbursed for costs of reporting data, other entities should receive comparable reimbursement for such costs. The Energy Commission will continue to pursue the issue of funding data collection costs to create a level playing field.

The Energy Commission further notes that ESPs are obligated to be the agent that collects, and is legally obligated by the California Public Utilities Commission (CPUC Decision #D.97-10-087), to be responsible for remitting appropriate Energy Commission ERPA-surcharge collections to the BOE. The Energy Commission needs a retailer-based reporting requirement because that is the basis of ERPA collection and remission. There have already been substantial problems with ERPA collection that, if not corrected, can have a major impact on funding of Energy Commission personnel and programs. The Energy Commission has already provided assistance to BOE in cross checking ESP/UDC ERPA submissions against consumption data to assure adequate collection of these funds. Without the retailer-based consumption data to cross check ESP and UDC submissions, the enforcement of surcharge collections is likely to be frustrated.

In addition, during the proceeding ESPs have raised major concerns about the confidentiality of their data. This was a major impetus behind the Energy Commission's move to separate data reporting responsibilities to those entities that actually serve their customers' loads. In that way, other so-called competitors in the

market would not have access to consumption data that retailers consider to be confidential. Yet, ESPs are now suggesting that UDCs know as much about their customers as they do and argue to have UDCs perform data collection on their behalf. The Energy Commission remains convinced that having all retailers submit data on their customer s energy consumption is the most appropriate way to acquire consumption data.

Parties further assert that the ability of UDCs to be reimbursed for data collection activities means they should bear all data collection costs, whether for them or for other direct access retailers. The Energy Commission believes this is not an appropriate allocation of costs and responsibilities in light of restructuring.

The Energy Commission further notes that, at this point, the CALMAC framework for collecting data and reimbursing costs is limited to those distribution related functions of SIC coding and research and survey activities on customer characteristics and load data. The Energy Commission believes the cost of filing consumption data on retail sales is a minor cost in comparison with the SIC coding that will be performed by UDCs to provide the economic activity details on consumption data used by the Energy Commission. The imposition of the small costs of collecting consumption data should not result in any significant harm on the competitiveness of the electricity market as some parties have contended. They represent a minor cost of doing business. As previously mentioned, much of the consumption data being requested by the Energy Commission is already being reported to other agencies. As a result, the ESPs are not required to collect and process consumption data for the sole purpose of meeting Energy Commission data needs.

The Energy Commission is willing to explore additional compliance options that would allow ESPs to file copies of equivalent data submitted to other agencies, such as BOE. To date, ESPs have not identified this as an alternative source of data. The Energy Commission has already explored the use of EIA data as a compliance option for consumption data, but notes that EIA data does not provide sufficient linkage to the economic activity associated with consumption. Increasing peak demands, including air conditioning loads, in California are becoming a major issue in assuring adequate and reliable supplies of electricity.⁹ This fact underscores the need for detailed data to allow the Energy Commission to assess the demand for electricity and helps identify solutions for peak load problems and other demand trends in the State.

The Energy Commission notes that allegations about costs and burdens largely ignore the innovative features contained in its approach to streamline and reduce overall reporting requirements. A more appropriate comparison for burdens and costs is against the existing reporting requirements under QFER and CFM. From this perspective, the Energy Commission s approach represents a major streamlining of existing data requirements that are largely ignored by parties in raising objections based on costs and burdens.

Funding Of Collaborative Data Collection Efforts

Several parties called for clarifications in the discussion of the funding mechanism proposed under the CALMAC framework the Energy Commission will rely on for collecting customer-characteristics and load-data. Because of the proposed importance of this framework to the Energy Commission's ability to implement a collaborative approach to data collection, and CBEE's apparent unwillingness to support it, the Energy Commission believes it important that the report accurately reflects the facts surrounding it.

AB 1890 charged the CPUC with administration of the energy efficiency PGC and makes no specific reference to CBEE. CBEE is an advisory body created solely by the CPUC, in order to gain input from a body of representative technical professionals. As such, CBEE does not exercise direct control over PGC expenditures. While CBEE makes recommendations to the CPUC about budgets for expenditures, the CPUC makes and implements formal decisions. In some cases the CPUC accepts CBEE recommendations, but it also has departed from their recommendations. In the area of measurement, analysis and evaluation the CPUC has acted in opposition to CBEE recommendations on several occasions. For example, the CPUC awarded funds to the Energy Commission for implementing commercial sector surveys from the year 1999 and year 2000 budgets despite CBEE opposition to year 2000 funding.

Some parties suggested in their comments that use of PGC funds to support data collection on consumer characteristics and loads were inappropriate. Others contend the use of these funds for such activities resulted in discretionary funding of government functions not envisioned under AB 1890. The Energy Commission disagrees with parties' characterization. When the options for continuing energy efficiency activities under restructuring were developed and when the PGC charge was created in AB 1890, the fact that utility demand-side management budgets contained various non-DSM activities was overlooked. Unfortunately, these activities involved utility compliance with data collection obligations. Many of the data collection activities support the continued understanding of demand side issues and demand forecasting that help to assure that expenditures on energy efficiency produce successful results. As such, they are not discretionary government functions and are instead directly related to the successful deployment of energy efficiency programs. The Energy Commission has struggled to obtain CPUC, and CBEE, recognition of this oversight and an agreement to permit PGC funds to cover such activities.

Several parties suggested that all parties who file consumption data—UDCs and ESPs—should be compensated for their costs. Since many of the implementation details on the CALMAC framework have yet to be resolved, it is not yet clear what specific costs associated with filing consumption data will be reimbursed. It does appear that at least the costs of SIC-coding and consumer characteristics research and survey activities would be covered. The Energy Commission supports the concept that if UDCs are compensated for costs that are equivalent to the costs incurred by ESPs for filing consumption data, it would be reasonable for ESPs to also be allowed compensation. The Energy Commission believes that this would be a step forward in

creating a level playing field on the retailer side. In looking at long-term, permanent funding of data collection activities the Energy Commission supports the concept that parties should be compensated for equivalent responsibilities and costs.

Several parties, particularly UDCs, have raised concerns about the need to identify a permanent funding source for data collection activities. The Energy Commission agrees with their concerns and has been working vigorously to provide a permanent resolution. Unfortunately, progress has been slow and the recent CALMAC framework is the first tangible evidence of progress in this area. However, as several parties have pointed out, much is yet to be done. To date, CBEE has been unwilling to endorse long term arrangements to provide PGC funds to the Energy Commission or any other organization to enable replacement of permanent obligations for utilities to conduct consumer characteristics surveys and other data related activities. CBEE has only endorsed single, project-specific funding of such surveys, and apparently wants to determine how well the Energy Commission can perform before it awards additional funding.

The Energy Commission believes that short-term, project-by-project funding does not provide the assurance necessary to reduce or eliminate altogether continuing obligations to collect and report consumer characteristics data. At the same time, the Energy Commission is very aware of the evolving nature of the newly restructured electricity market and progress being made toward a permanent solution. However, the Energy Commission does not believe that the position of several parties on this issue is realistic or reasonable. SEMPRA has taken the position that they cannot support the Energy Commission's approach and should not be required to meet proposed customer characteristics data obligations, even through a collaborative, until a permanent solution for funding is in place. The Energy Commission believes that accepting this position would be similar to parties opposing the initial operation of the ISO and PX because all of the features of the market could not be in place at the start date of operation. Just as government agencies and other parties were willing to allow features of the market to evolve, parties should support the Energy Commission's approach in the interim while issues are worked out between the market participants, government agencies, the Legislature and the Administration.

The Energy Commission is aware, as noted in several parties' comments, that the CPUC has not yet approved the CALMAC framework, and that there is opposition to the agreement from some organizations. The Energy Commission believes it is essential that parties interested in reducing data collection obligations support CPUC approval of the CALMAC framework. UDCs have an interest in supporting the agreement to reduce their own data reporting obligations through the collaborative efforts, as do ESPs who might benefit from the data resulting from the projects and some costs recovery opportunities. The Energy Commission will make its support for the agreement known at each opportunity in the CPUC proceeding. Finally, these same parties can provide support for a permanent funding source for Energy Commission-conducted surveys and reimbursement of entities with significant support costs.

Confidentiality and Disclosure

Most parties indicated their support for the Energy Commission's intent to revise confidentiality regulations in a parallel process to include the development of data collection regulations. Parties are also generally supportive of the preliminary confidentiality and disclosure provisions outlined in the report. Parties appear to prefer a before the fact disclosure approach to the current 3/60 rule in confidentiality regulations. The Energy Commission is pleased that parties have indicated a commitment to address confidentiality details in the proposed revision process.

Staff provided additional input on the Energy Commission's use of EIA survey disclosure practices and techniques for survey data that has been incorporated in the consumer data section of the report. They note that CBEE, various program administrators, and the CPUC are likely to be interested in the results of these surveys. In addition, utilities that provide data for use in the sampling frame and that provide distribution and/or commodity energy services to end-use customers in the sample in the population at large have expressed an interest in having access to data. Non-project sponsors may also be interested in the data.

The Energy Commission agrees with the dilemma staff identified in disclosure of survey data. On the one hand, these data are used to develop inputs for demand forecasting models, and staff generally wishes to be able to provide the information used in its modeling activities. Excessively restrictive data disclosure may reduce what has traditionally been reported in technical documentation on the demand forecast. On the other hand, there are privacy concerns for residential and small commercial businesses, and trade secret concerns for larger business. These argue for careful attention to disclosure of identifiable records. As noted in the report, EIA is able to provide residential and commercial survey results at the individual record level with some minor adjustments to minimize, if not fully eliminate, attempts to actually identify end-users. The Energy Commission intends to accomplish the same result using techniques similar to EIA's.

The Energy Commission understands that industrial sector data is harder to mask because the general location, size and distinguishing characteristics (such as the processes used at a particular site) may be sufficient to identify the facility. Use of EIA techniques should be sufficient to protect these data. The Energy Commission will provide appropriate resources to the staff to implement the sophisticated masking techniques pioneered by the EIA.

Special Considerations For The Natural Gas Market

The Energy Commission believes its new reporting approach based on the equivalent function principle is the appropriate way to collect data on natural gas consumptions. This approach would require gas marketers who perform a retailing function to report their customers' sales directly to the Energy Commission, rather than relying on utilities to file this data on their behalf. EIA and other states are moving in this same direction in changing their reporting requirements. The Energy Commission is

convinced that this change results in a more fair distribution of reporting obligations than previous approaches.

However, the Energy Commission acknowledges the concerns raised by gas aggregators and marketers. The Energy Commission believes that core aggregators would be faced with a cost for reporting that is disproportionate to the small volume of sales in which they engage. The Energy Commission also recognizes that in some, and possibly all cases, utilities may be willing to continue reporting consumption data on their behalf.

Load Research

The Energy Commission believes that load research concerns raised by Edison and PG&E appear misguided. Edison continues to file hourly system load data with FERC pursuant to its obligations for Form 714. It did so for all of calendar 1998. Further, this hourly system load data continues to be collected and provided to the ISO for use in various cost allocation activities. The Energy Commission will continue to impose an hourly system load reporting requirement on all utilities. The Energy Commission believes the incremental cost of its requirement to be negligible—in the face of ISO and FERC requirements.

The customer sector concerns raised by Edison and PG&E have some validity even though the Energy Commission is unconvinced by specifics they raised. Existing Energy Commission regulations (Title 20, Section 1344 (c)(2) spell out the broad customer sectors for which peak load estimates and daily load shapes are already required. The Energy Commission disagrees with Edison's assertion that the Energy Commission requirements for customer sector will impose additional costs. These costs have existed for more than a decade. Nor does the Energy Commission believe that PG&E's assertion that there will be an unbridled ability to redefine customer sectors is true. These are precisely defined by SIC code groups in the above mentioned 1344 (d)(3) provisions.

Finally, the suggestion that PG&E submitted about restricting the use of load research data reported to the Energy Commission is not acceptable. The Energy Commission cannot, and will not, restrict in advance how it uses data reported to it.

CHANGES IN RESPONSE TO PARTIES' COMMENTS

The Energy Commission has made several changes to reflect the parties comments. These are summarized below.

Parties commented that changes in the saturation and average energy consumption by major end-use category in a two year period are not large enough to be measured through load surveys as proposed by the Committee. SCE proposed that the required frequency for all surveys should be five years. In response, the staff suggested that

requiring fixed surveys every three years for residential and commercial surveys and four years for industrial surveys would be more appropriate, considering the validity of parties' comments. EIA requires residential surveys every four years. Recognizing the difference of opinion on the timing of surveys, the Energy Commission, as it has done in numerous other areas, believes it is appropriate to move toward the EIA requirements. As a result, the Energy Commission changed residential and commercial survey requirements from once every two years to once every four years. The four year fixed survey requirements for industrial surveys will remain unchanged. The Energy Commission has also added a specific approach for disclosure of survey data to different interested parties as presented in the report.

The Energy Commission agrees with parties' concerns regarding the relatively small volume represented by the core aggregator market and the fact that utility local distribution companies retain an obligation to serve core customers. As a result, the Energy Commission added a compliance option for core aggregators who operate strictly within the CPUC core aggregation program that would result in lower costs. This compliance option would allow these small retailers to rely on the agent relationship they described with utilities, so long as the utilities are willing to accept the reporting obligation. Utilities would have to submit the aggregators' data separately from their own sales. To the extent that utilities have agreed to provide, or the CPUC directs them to provide, these services to core aggregators, the Energy Commission will accept data filed in this manner.

The Energy Commission will require ESPs and UDCs to file consumption data on their customers. However, at least one utility (PG&E) has indicated that they agree with those ESPs who have commented that energy consumption by SIC code is most efficiently reported by the UDCs. In the way of clarification, the Energy Commission will require UDCs to perform the SIC coding for all customers, including ESP customers, meaning that the most significant cost of meeting the Energy Commission consumption-data reporting requirements will not be imposed on ESPs. However, for those UDCs who are willing to report consumption data for the ESPs, because they believe it is more efficient, the Energy Commission agrees that this method of reporting should be allowed. As a result, the Energy Commission is adding a compliance option that would allow ESPs to have UDCs report consumption data on the ESPs' behalf. This compliance option would allow ESPs to rely on an agent relationship, where a UDC accepts the responsibility for filing a particular ESP's consumption data. UDCs would have to submit the ESP's data, as provided in the Energy Commission's consumption reporting requirements, separately from their own sales. To the extent that UDCs have agreed to provide, or that the CPUC or Legislature directs them to provide, these services to ESPs, the Energy Commission will accept consumption data filed in this manner.

Because of our concerns about electric system reliability and the need for load research data to understand how various customer sectors contribute to system reliability at various times throughout the summer, the Energy Commission will make two changes to its original proposal:

1. The customer sectors for which load research data must be reporting shall be those groups defined in 1344(d)(3) (A) through (J) inclusive, except that group (G) will be split between agriculture and water pumping, and group (I) will be eliminated; and
2. Utilities must provide more disaggregated load research data requested by the Energy Commission staff when disaggregated grouping of load research sampling points is needed than is provided routinely in the groups defined above. Utilities may request Energy Commission confidentiality designation if the utility believes that it is warranted by the level of disaggregation requested.

END NOTES

¹ *Report on the Energy Market Proceedings*, Ad Hoc Information Committee, June 12, 1998.

² Public Resources Code Section 25216.5

³ (As commonly used)

⁴ For example, Energy Commission staff released a report in July 1999 examining Electric System Reliability under hot weather conditions, as load grows over time. This report identifies concerns with system adequacy beginning in the year 2001. This report relies on continued delivery of load data to the Energy Commission now being considered by the Committee in this proceeding.

⁵ Chapter 275, Statutes of 1997.

⁶ The four UDCs (SCE, PG&E, SDG&E and SCG), the Office of Ratepayer Advocates, and the Energy Commission submitted Joint Recommendations for Market Assessment and Evaluation Activities in the 1999 Annual Earning Assessment Proceeding of the CPUC. CALMAC membership includes the six parties who joined the agreement, plus the Low Income Governing Board and California Board for Energy Efficiency.

⁷ It is likely that this data exchange would be most efficient if conducted as part of the Direct Access Service Requirements (DASR) process, but that some make up effort will be needed for current direct access customers.

⁸ Ad Hoc Information Committee Report on Energy Market Information Proceedings, June 12, 1998.

⁹ High Temperature and Electricity Demand Report, July 1999.

APPENDICIES

Appendix A:

List of Forms Eliminated for the Supply Portion
Of the **1996 Electricity Report (ER 96)**

List of Forms for the Supply Portion of the
1996 Electricity Report (ER 96)
For Non-Regulated Utilities

Revisions to **Quarterly Fuel And Energy Report (QFER)** Forms

Appendix B:

Facilitating Compliance/Compliance Options for Power Plant
Characteristics Data

Appendix C:

Energy Market Information Proceeding Workshops,
Papers and Comments
Related to Generation and Consumer Data Collection

Appendix D:

Illustrative Samples of Forms for Fuel Price Estimation

Appendix E:

Adopted Resolution for
Generator and Consumer Data Reporting Requirements
(November 18, 1999, Business Meeting)

APPENDIX A-1

LIST OF FORMS *ELIMINATED* FOR THE SUPPLY PORTION OF THE 1996 ELECTRICITY REPORT (ER96)

- R-1 Summary of Loads and Resources
- R-2 Summary of Energy Requirements and Resources - Recorded
- R-3 Existing, Committed and Planned Utility-Owned Resources
 - R-3A Thermal Resources
 - R-3B Hydro Resources
 - R-3C Pumped Storage
 - R-3D Monthly & Annual Hydro Variation Data for Production Cost & Reliability Modeling
- R-4 Qualifying Facilities, Self-Generators & other Non-Utility Generators
 - R-4A Capacity
 - R-4A1 Dependable Firm Capacity
 - R-4A2 Undependable Firm Capacity
 - R-4A3 Dependable As-Available Capacity
 - R-4A4 Undependable As-Available Capacity
 - R-4A5 Total Dependable Capacity
 - R-4B Power Plant Performance Factors for Qualifying Facilities/Self Generation
 - R-4C Energy
 - R-4C1 Energy from Dependable Firm Capacity
 - R-4C2 Energy from Undependable Firm Capacity
 - R-4C3 Energy from Dependable As-Available Capacity
 - R-4C4 Energy from Undependable As-Available Capacity
 - R-4D: Prices for Energy
 - R-4E Individual Project Data Base
 - R-4F On-Line Capacity
- R-5 Inter-Utility Transactions—Existing and Committed
 - R-5A Exports
 - R-5B Imports
- R-6 No Longer Used
- R-7 Environmental Pollutants, Fuel Storage, Land & Water Use
- R-8 Historical & Projected Operations Data (Power Plant Performance Factors)
 - R-8A Historical Outage Data
 - R-8B Performance Factors Used in Resource Case Analysis
 - R-8C Performance Factory for Combustion Turbines
- R-9 Off-System Losses for Remote Resources
- R-10 Fuel Consumption & Resources
 - R-10A Historical and Projected Fuel Consumption
 - R-10B Heat Content and Cost of Fuel Resources
- R-11 Resource Options & Technology Characterizations
- R-12 Construction Outlays for Individual Utility Electric Plant Additions
- R-13 Financial Variables
 - R-13A Financial Variables: Life of plant by Asset Type
 - R-13B Fixed Charged Rates
- R-14 Inflation, Discount, and Escalation Rates

APPENDIX A-2

LIST OF FORMS *ELIMINATED* FOR THE SUPPLY PORTION OF THE 1996 ELECTRICITY REPORT (ER 96) FOR NON-REGULATED UTILITIES

- R-3 Existing, Committed and Planned Utility-Owned Resources
 - R-3A Thermal Resources
 - R-3B Hydro Resources
 - R-3D Monthly & Annual Hydro Variation Data for Production Cost & Reliability Modeling
- R-4 Qualifying Facilities, Self-Generators & other Non-Utility Generators
 - R-4A Capacity
 - R-4A1 Dependable Firm Capacity
 - R-4A2 Undependable Firm Capacity
 - R-4A3 Dependable As-Available Capacity
 - R-4A4 Undependable As-Available Capacity
 - R-4A5 Total Dependable Capacity
 - R-4B Power Plant Performance Factors for Qualifying Facilities/Self Generation
 - R-4C Energy
 - R-4C1 Energy from Dependable Firm Capacity
 - R-4C2 Energy from Undependable Firm Capacity
 - R-4C3 Energy from Dependable As-Available Capacity
 - R-4C4 Energy from Undependable As-Available Capacity
 - R-4D: Prices for Energy
- R-7 Environmental Pollutants, Fuel Storage, Land & Water Use
- R-8 Historical & Projected Operations Data (Power Plant Performance Factors)
 - R-8A Historical Outage Data
 - R-8B Performance Factors Used in Resource Case Analysis
 - R-8C Performance Factory for Combustion Turbines
- R-11 Resource Options & Technology Characterizations

APPENDIX A-3

REVISIONS TO FORMS

QUARTERLY FUEL AND ENERGY REPORT (QFER) FORMS		FORM STATUS
Electric Utility and Gas Utility Forms		
Form 1	Electric Utility Monthly Generation Resources	ELIMINATED
Form 2	Electric Utility Monthly Inter-Utility Transactions	TO BE DETERMINED
Form 2A	Electric Utility Monthly Purchases from Non-Utility	ELIMINATED
Form 3	Electric Utility Monthly Use of Generation Fuel	ELIMINATED
Form 4	Electric/Gas Utility Monthly Sales/Deliveries by SIC Code	REVISED
Form 4A	Electric/Gas Utility Monthly Resale and Annual Projection	ELIMINATED
Form 4B	Electric/Gas Utility Corrections to Form 4 Data	ELIMINATED
Form 5	Electric/Gas Utility Annual Sales by SIC Code and County	ELIMINATED
Form 6A	Gas Utility Monthly Receipts (with annual costs)	TO BE DETERMINED
Form 6	Gas Utility Monthly Send-out (with annual revenues)	TO BE DETERMINED
Form 7	Gas Utility Annual Revenue by SIC Code and Rate Category	ELIMINATED
Form 13	Electric Utility Estimate of Monthly Self Generation	ELIMINATED
Form 14	Gas Utility Estimate of Monthly of Self Generation Gas Use	ELIMINATED
Form 15	Electric Utility Annual List of Self-Generating Facilities	REVISED
Form 16	Electric/Gas Utility Biennial SIC Code Accuracy Report	TO BE DETERMINED
Gas Producer, Gas Processor, and Gas Marketer Forms		
Form 8	Gas Producer Report	NO CHANGE
Form 9	Gas Processor Annual Report	NO CHANGE
Form 10A	Gas Producer/Marketer Annual Report	REVISED
Non-Utility Electric Generator Forms		
Form 11	Non Utility Monthly End-use of Generated Electricity	Combined
Form 12	Non Utility Monthly Use of Fossil Fuels for Generation	

APPENDIX B

FACILITATING COMPLIANCE/COMPLIANCE OPTIONS FOR POWER PLANT CHARACTERISTICS DATA

Comprehensive Database

Energy Commission staff will develop a database review process to facilitate compliance with the regulations reporting requirements. Generators would be sent a copy of the values for power plant characteristics which we currently use and which they are required to provide under the new data collection regulations. This approach is recommended because it will save respondent effort and avoid confusion about what data is specifically required. It may facilitate compliance with data reporting requirements.

The following steps would be involved with this database-review process:

- Step 1. Describe obligation to provide specific generating characteristics in new regulations.
- Step 2. Develop structure of database with fields for each specific data requirement.
- Step 3. Determine which fields require confidential treatment to avoid disclosure where prohibited.
- Step 4. Populate database with data from most current sources.
- Step 5. Sort database by owner of generator and generating unit.
- Step 6. Send owner a copy of the database's values for characteristics owner is required to provide.
- Step 7. Receive owner's updated database, or any other format of the required data, and the owner's legal attestation that its filing meets the regulatory requirements.
- Step 8. Review data received for compliance, accuracy and validity.
- Step 9. Send owner follow-up data requests where necessary and work with owner on any questions regarding accuracy and validity.
- Step 10. Receive omitted or corrected data from owner.
- Step 11. Repeat steps 9 and 10 until generator submits all data required by the new regulations.
- Step 12. Insert collected data into revised database.
- Step 13. Impose confidentiality protections at individual variable levels to prepare non-confidential version of database for unrestricted use.
- Step 14. Use and safeguard confidential database in accordance with proper procedures.

APPENDIX C

Energy Market Information Proceeding Workshops, Papers And Comments Related To Generation And Consumer Data Collection

1997 Filings

Dec. 1, 1997	Staff Report on Supply Data
Dec. 15, 1997	Committee Workshop of Supply Data (cancelled at parties request)

1998 Filings

Feb. 1998	Deadline for Parties Comments on Generation & Consumer Data
June 25, 1998	Draft Final Scoping Report
July 6, 1998	Comments on Report from MRW & Associates rep: AEP, EP, Coral Energy, GreenMountain Energy, New Energy Ventures
July 9, 1998	Workshop
July 17, 1998	EP/Co-Gen Council's Letter to Commissioners
July 28, 1998	Final Committee Scoping Report
Aug. 18, 1998	Staff Paper: Power Plant Characteristics
Sept. 2, 1998	Workshop and Presentation
Sept. 2, 1998	Comments from CA Biomass Energy Alliance, and Arter & Hadden rep: Dynergy Inc. and Reliant Energy (formerly Houston Industries)
Sept. 4, 1998	Staff Paper: Power Plant Fuel Cost Air Pollutant Emission and O&M Cost Characteristics
Sept. 4, 1998	Staff Paper: Consumer Information Needs to Support Monitoring & Policy Assessment Functions.
Sept. 15, 1998	Staff Paper: Basic Steps in Conducting Surveys.
Sept. 15, 1998	Staff Paper: Collecting Consumer Structural Characteristics Data by Means of Surveys.
Sept. 17, 1998	Workshop with Presentations by Staff and EP (and Joint Representatives) on QFs, Public & Private Utilities, Merchant Plant Developers, Divested Plant Purchases, Customers and others
Sept. 18, 1998	Joint SB 1305 & 97-DC&CR-1 Workshop. (Regional Tracking) Two presentations: Phil Carver from Oregon Office of Energy and Staff.
Sept. 29, 1998	Workshop and Presentation
Oct. 13, 1998	Workshop and Presentation/Staff Comments re: 9
Oct. 22, 1998	Staff Paper: Power Plant Historic Production Data
Nov. 16, 1998	Notice Modifying the Schedule for the Second Phase of the Data Collection Rulemaking
Dec. 4, 1998	Notice of Extension of Deadline for Filing Comments re: Staff Papers
Dec. 11, 1998	Edisons Comments on Power Plant Production Data
Dec. 15, 1998	SEMPRA Comments on Power Plant Production Data

1999 Filings

Feb. 2, 1999	Comments from Enron Corp., GreenMountain Energy Resource, New Energy Ventures
Feb. 26, 1999	Edisons Comments to (Feb., 2, 1999) Comments from Enron & Company
Mar. 17, 1999	Staff Comments to Committee on Getting Heat Rate Data from Generators
Apr. 28, 1999	Notice of Hearing on Proposed Generator Reporting Requirements for May 10, 1999
Apr. 28, 1999	Committee Report: Draft Proposed Generator Reporting Requirements

Energy Market Information Proceeding Workshops, Papers And Comments Related To Generation And Consumer Data Collection (continued)

May 4, 1999	Expert Witness Report: Collecting Energy Information Through Surveys, by Dr. Roger L. Wright, Ph.D, RLW Analytics, Inc.
May 10, 1999	Committee Hearing
May 10, 1999	Edison Comments on Proposed Generator Reporting Requirements
June 7, 1999	IEP Comments on Proposed Generator Reporting Requirements
June 7, 1999	Mammoth - Comments on Proposed Generator Reporting Requirements
June 7, 1999	SEMPRA - Comments on Proposed Generator Reporting Requirements
June 7, 1999	The Southern Company (SEI) Comments on Proposed Generator Reporting Requirements
June 7, 1999	Staff Comments on Proposed Generator Reporting Requirements
June 9, 1999	California Cogeneration Council (CCC) Comments on Proposed Generator Reporting Requirements
June 28, 1999	Notice of Committee Hearing for July 22, 1999 and to extend due date of parties to file comments on Proposed Generator Reporting Requirements
July 13, 1999	Staff Rebuttal to Parties Comments on Proposed Generator Reporting Requirements
July 22, 1999	Committee Hearing
July 22, 1999	Staff Presentation at Committee Hearing on Electricity Generation Fuel Prices
Aug. 17, 1999	Committee Report: Final Proposed Generator Reporting Requirements
Sept. 17, 1999	Notice of Committee Hearing for October 10, 1999 on Draft Proposed Consumer Data Reporting Requirements
Sept. 17, 1999	Committee Report: Proposed Consumer Data Reporting Requirements
Oct. 6, 1999	California Manufacturing Association (CMA) Comments on Proposed Consumer Data Reporting Requirements
Oct. 6, 1999	Pacific Gas & Electric (PG&E) Comments on Proposed Consumer Data Reporting Requirements
Oct. 6, 1999	Staff Comments on Proposed Consumer Data Reporting Requirements
Oct. 7, 1999	Southern California Edison (Edison) Comments on Proposed Consumer Data Reporting Requirements Comments on Proposed Consumer Data Reporting Requirements
Oct. 8, 1999	SEMPRA
Oct. 11, 1999	Joint Parties (Enron, New Energy, Inc., GreenMountain.com, Uinity.com) Comments on Proposed Consumer Data Reporting Requirements
Oct. 13, 1999	Committee Hearing on Proposed Consumer Data Reporting Requirements
Oct. 19, 1999	PG&E- Additional Comments on Proposed Consumer Data Reporting Requirements
Oct. 19, 1999	SEMPRA- Additional Comments on Proposed Consumer Data Reporting Requirements
Oct. 19, 1999	SPURR (School Project for Utility Rate Reduction, Utilicorp Energy Solutions, Inc. and TXU Energy Services) Comments on Proposed Consumer Data Reporting Requirements

APPENDIX D

ILLUSTRATIVE SAMPLES OF FORMS FOR FUEL PRICE ESTIMATION

Possible Form on Fuel Price Dispatch Decisions

A) Dispatch Price Option	B) Check If You Rely on This Price	C) For Each Price Indicate % Reliance
Current Delivered Price		%
Market Price		%
a. California		%
b. Topoch		%
c. Malin		%
d. Wheeler Ridge		%
None of the Above (If you checked column B in this row, please provide explanation of dispatch price used.)		%

**Possible Form on Estimated Future Natural Gas Supply
(Power Plant Site Name)
Estimated Future Natural Gas Supply Mix by Supply Source
(Check the appropriate boxes)**

Supply Mix	California	Topoch	Malin	Wheeler Ridge
0-20%				
21-40%				
41 to 60%				
61 to 80%				
81 to 100 %				

APPENDIX E
ADOPTED RESOLUTION FOR
GENERATOR AND CONSUMER DATA REPORTING
REQUIREMENTS